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THE PROSPECTS FOR U.S.-DPRK RELATIONS AND U.S.-ROK COORDINATION ON THE NORTH KOREAN POLICY

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Abstract

North Korea's nuclear and missiles development are expected to pose a direct threat to the U.S security in the near future. The Trump administration can no longer sit back and watch North Korea's nuclear and missile threats. There could be either a great compromise or the end point of conflict between the U.S. and North Korea. The circumstances of the Korean Peninsula will become more complicated in an unexpected manner with U.S. policy on North Korea, North Korea's response, and effects and counter-effects of major actors, including South Korea and China. South Korea needs to be preemptively prepared on its policy considering various scenarios of U.S.-DPRK relations. First, with a clear principle and policy, South Korea needs to coordinate its policy with the Trump administration. Second, the South Korean government needs to enhance the reliability of U.S. nuclear deterrence against North Korea. Third, the ROK should support the U.S. and international efforts to toughen sanctions against North Korea for the short-term. However, diplomatic efforts should also be followed. Fourth, an ultimate goal of pressure and sanctions against North Korea is to resolve the North Korean nuclear missile issue in a peaceful manner.

Key words: the U.S.-DPRK relations. U.S.-ROK coordination, sanctions, deterrence, North Korean nuclear issue.

INTRODUCTION

What kind of North Korean policy will the Trump administration adopt under its neo-isolationism and 'America First' principle? With the North Korean nuclear issue being high on its policy agenda, the Trump administration will probably calibrate the effectiveness of pressuring North Korea and exploring the possibility of dialogue with North Korea. Moreover, it is projected that the Trump administration will emphasize China's role in resolving the North Korean nuclear issue by putting more pressure on China, and require it to undertake the role as a mediator.

Meanwhile, the Democratic People's Republic of Korea (DPRK) continues to advance its nuclear and missile capabilities and devotes all-out-efforts to be recognized as a de facto nuclear state. Through additional nuclear tests and medium- to long-range missile launches, Pyongyang will continue to advance its nuclear capability and establish itself as a nuclear state. Concurrently, North Korea seems likely to make a peace offensive by suggesting a dialogue to the US. However, the DPRK will never agree to denuclearization even in the dialogue phase with the US, and demand a peace negotiation under the condition of being recognized as a nuclear state.

Considering these factors, the U.S.-North Korea relations after the Trump administration are expected to unfold in an unpredictable and dynamic manner. Therefore, the South Korean government should make a projection of the Trump administration's North Korean policy and possible responses from the North, and craft its own policy accordingly. ROK should also set a basic direction of U.S.-ROK policy coordination based on the prospects of U.S.-DPRK relations. Especially, policy coordination measures on specific North Korean and unification-related issues should be put in place, such as nuclear and missile issue, an improvement in U.S.-DPRK relations, inter-Korean relations, North Korean human rights, expansion of influx of information, peace settlement on the Korean Peninsula, unification issue, and the future of ROK-US alliance.

PROSPECTS FOR U.S.-DPRK RELATIONS

1. Prospects for the Trump Administration's North Korean policy

North Korean nuclear issue is expected to become higher on the policy agenda under the Trump administration. North Korea's nuclear development has become a direct threat to the US national security as it has advanced its nuclear capability through five nuclear tests and focused on a missile development that can reach Guam and the US mainland. This will leave the Trump administration willing to resolve North Korean nuclear issue with all means available.

The Trump administration's foreign policy and security team released a joint statement on April 26th, revealing the outline of its North Korean policy for the first time when all the senators were invited to the White House. The joint statement pointed out the followings: 1) past efforts for denuclearization of North Korea have failed, 2) North Korean nuclear issue is an imminent security threat and a top foreign policy priority, 3) the ultimate goal is dissolving nuclear and ballistic missile program, 4) there is a need to intensify economic sanctions along with imposing diplomatic pressure on North Korea, 5) a relaxation of tension and dialogue should be called for North Korea, and 6) cooperation among the ally countries - South Korea and Japan - should be fortified.[1]

The Trump administration's North Korean policy can be summarized into "maximum pressure and engagement," which indicates its determination to use a tactic of "escalate to de-escalate" in order to bring North Korea to surrender. It also means that the US administration will prioritize economic sanctions and diplomatic and military pressure while considering various options against North Korea. Various scenarios can be put forward depending on whether pressure or engagement should be a priority and in which order those two should be implemented. In short, the gist of the Trump administration's North Korean policy is to pressure North Korea first into making a strategic decision on denuclearization and then ultimately lead the DRPK to denuclearization through negotiation. In this regard, "maximum pressure and engagement" can be construed as "maximum pressure for engagement."

The Trump administration's maximum pressure and engagement policy is known to have the following four principles as they were set in a meeting between Korean visiting group, including a member of People's Party Kim Kwan-young and Special Representative for North Korea Policy at the U.S. State Department Joseph Y. Yun: 1) disapproval of North Korea as a nuclear state, 2) implementation of all kinds of pressure and sanctions on North Korea, 3) exclusion of the attempt for a regime change of North Korea, and 4) the ultimate settlement of issues through dialogue (Yonhap News, May 26, 2017).

The disapproval of nuclear North Korea is a reaffirmation of its basic principal of denuclearization. The other principles can be considered to be options for shaping North Korean policy. In fact, as North Korean policy options do not have to be applied in specific order and are not mutually exclusive by nature, they will be pursued in parallel and flexibly depending on a change in situation. It is anticipated that the US North Korean policy options will be applied with the varying degree of importance and priority according to North Korea's response, China's role, and U.S.-ROK consultation.

[1] U.S. Department of State, Joint Statement by Secretary of State Rex Tillerson, Secretary of Defense James Mattis, Director of National Intelligence Dan Coats, Media Note Office of the Spokesman, Washington, DC, April 26, 2017, https://www.state.gov.

Table 1. The Trump Administration's North Korean Policy Options

Option	Contents	Constraining Factors
Sanctions against North Korea	* The UN multilateral sanction, the US bilateral sanction (bill on sanctions against North Korea, executive order) * Pressure on China: demand China's cooperation for sanctions on North Korea, the US economic concession to China (defer measures to reduce trade deficit against China, postpone designating China as currency manipulator), secondary boycott	North Korea's low dependence on foreign trade, the North's strong determination for nuclear possession, China's lukewarm attitude toward North's nuclear pursuit, Chinese backlash and economic retaliation against secondary boycott
Diplomatic and military pressure	* Diplomatic pressure: bilateral and multilateral level * Military measures: military demonstration(U.S-ROK. joint military exercise, deployment of strategic assets on the Korean Peninsula, military attack (simple rhetoric·declaration, preventive attack, preemptive strike, etc.)	Risks of military attack: dispersion and concealment of nuclear·missile facilities, military intervention of China, South Korea's opposition, possibility of war escalation
Regime Change	Military methods(decapitation operation) or inducement of North Korea to regime change in the mid to long term	Risks and uncertainty of regime change, uncertainty on management after regime change
Dialogue	* Condition of dialogue: declaration of determination for denuclearization, moratorium, etc. * Format of dialogue: U.S.-DPRK dialogue, six-party talks, etc. * Denuclearization process: road map to gradual and comprehensive negotiation	Difficulty of gradual negotiation, difficulty of verification, possibility of North Korea's nullification of agreement

**Preventive attack: It is an attack during peacetime for prevention purpose. Consultation between South Korea and the U.S. is required.*

**Preemptive strike: Preemptive attack is launched during wartime when there is a sign of potential attack. Combined Forces Command exercises wartime operational control. U.S.-ROK consultation is not required. Preemptive strike plan is included in ROK-US operational plan.*

- In fact, preemptive strike, perceived by the US government and the public, is a preventive attack when strictly speaking.

2. North Korea's Response

North Korea hoped that President Trump coming into power could alleviate sanctions against North Korea and trigger a crack in the U.S.-ROK alliance. North Korea predicted that U.S.-ROK alliance would be weakened and frictions over North Korean policy between two countries could arise due to conflicts over the division of share of defense budget, growing discourse over the withdrawal of the US Armed Forces in Korea, weakening of the US nuclear deterrence, and discord over deployment of Terminal High Altitude Area Defense (THAAD). Moreover, North Korea anticipated that China will not go too far abandoning North Korea even with Trump's emphasis on China's role. Rather, Pyongyang would have pictured a situation where its stance can be reflected through China under the US-China's agreement on resolution over North Korean nuclear issue through a dialogue.

North Korea has devoted all-out-efforts to make the possession of nuclear weapons an established fact while continuing the advancement of nuclear·missile technology. Chairman of the Workers' Party of North Korea Kim Jong-un provoked President Trump in his New Year's address on January 1st by boasting that intercontinental ballistic missile is one step away from test-launching in the final stage of preparation. The very next day, President Trump refuted the North Korea's claim saying that although it claimed to have reached a final stage of nuclear weapons development that can strike some parts of the US mainland, such attack will never happen.

The DPRK reported that it launched IRBM called the Pukguksong-2 on February 12th and conducted a combustion experiment

on ICBM's new high powered-engine on March 18th as if to prove its grandiloquent arguments. Henceforth, North Korea has launched various types of missiles on significant occasions.[2] With a basic goal of advancing missile development in mind, North Korea explores the timing for missile launches comprehensively considering the following conditions: 1) political situations such as presidential elections in South Korea and the US, 2) military situations such as U.S.-ROK joint military exercise, 3) South Korea's and the US's North Korean policy, and 4) international community's attitude toward North Korea (Hong Min, 2017). Moreover, North Korea has intention to use missile development in boosting bargaining power over potential resumption of U.S.-DPRK dialogue or inter-Korean dialogue.

Pyongyang heavily criticizes the US for its maximum pressure and engagement policy and declares its adherence to nuclear tests and ballistic missile launches for enhancing nuclear deterrence.[3] And North Korea strongly condemned the US's four principles of North Korean policy (Korean Central News Agency, June 1, 2017)

By conducting additional nuclear tests and launching mid-range missiles, North Korea will seek to advance its nuclear capabilities and establish itself as a nuclear state. Pyongyang is highly likely to pursue another nuclear test to meet their own needs for technological development, regardless of the possibility of talks with the U.S. Moreover, the regime will continue developing long-range missile, which can reach Guam and the continental US. Further nuclear tests and ballistic missile launches will result in harsher reaction from the Trump administration and rule out the likelihood of bilateral talks. Nevertheless, North Korea is expected to make such attempts so as to advance its nuclear capabilities and improve negotiation power over the U.S.

Meanwhile, North Korea carries out a peace offensive for negotiations with the U.S. After the inauguration of the Trump administration, a track 1.5 meeting was scheduled to take place in New York in early March. The meeting, however, was cancelled due to North Korea's launch of ballistic missiles and the assassination of Kim Jong-nam, the estranged half-brother of the North Korean leader Kim Jong-un. Choi Sun-hee, the Deputy Director of North Korea's foreign ministry, made a gesture of appeasement toward the Trump administration by saying, "North Korea will restrain itself from provocation until the new administration finalizes its policy on North Korea." The contact between Washington and Pyongyang was made early May (from May 8 to 9, 2017) in Oslo for the first time since President Trump took office. After the meeting, Choi said that North Korea would hold talks with the US under the right conditions (Yonhap News Agency, May 13, 2017). It was the first time under the Trump administration that a responsible North Korean officer mentioned the possibility of bilateral talks.

Which kind of card will North Korea play on the negotiating table with the U.S. and what will they try to obtain? On January 2015, North Korea made a proposal that it would cease the launch of nuclear weapons and ballistic missiles under the condition of stopping the U.S.-ROK joint military exercise. It also proposed to conclude a peace treaty with the U.S. and hold a conference on nuclear disarmament. In addition, the North argues that only when the U.S. abandons its hostile policy toward North Korea could the U.S.-North Korea talks be held (Rodong Sinmun, April 22, 2017). Kim In Ryong, North Korean Deputy Representative to the U.N., made his position clear that the abolition of nuclear weapons is not on the agenda for talks and that the withdrawal of U.S. hostile policy toward the North should come first before simultaneously pursuing denuclearization and peace treaty (Yonhap News Agency, April 29, 2017).

[2] North Korea launched various ballistic missiles a day before U.S.-China summit meeting (4.5), after Kim Il-Sung's birthday (4.16) and also launched four missiles after President Moon Jae-in's inauguration (5.14, 5.21, 5.29, 7.4)

[3] Announcement of North Korea's Foreign Ministry's spokesperson, Korean Central News Agency, 2017.5.1.

North Korea is deploying a dual-strategy of posing a threat on one hand and increasing the negotiation price on the other hand. What North Korea wants is to be recognized as a nuclear state and to have negotiations over nuclear disarmament. Pyongyang will explore the counterparts' interests through the track 1.5 or 2 meeting with the U.S. while adjusting the level of provocation. In such process, it will make existing proposals more concrete and suggest a new agenda to take a hint of the U.S. position.

3. Scenarios of the U.S.-DPRK Relations

What kind of situation will unfold if the Trump administration's policy options and North Korea's dual strategy meet together? If we divide the U.S. policy options into dialogue and pressure, and North Korea's into moderate and radical, four combinations are possible in theory (Cha, 2017).

Scenario A (partial compromise: nuclear freeze) is when U.S. dialogue meets with the North Korean moderate. Under such scenario, both countries avoid a catastrophe and adopt the second best option, which will make a partial compromise (nuclear freeze) possible. In detail, the US and North Korea could have negotiations primarily aiming for a nuclear freeze, and hold six-party talks based on the progress. A downsizing or temporary suspension of U.S.-ROK joint military exercise and a moratorium on nuclear weapons and missiles will be discussed during the first stage of dialogue. And an inspection of North Korean nuclear facilities by the International Atomic Energy Agency (IAEA) and implementation of a nuclear freeze will be talked about at the next stage.

Scenario B (denuclearization) is when North Korea gives in to the U.S. pressure, leading to denuclearization. However, as North Korea is setting the nuclear development as a survival strategy for the regime, it is very unlikely to surrender without any strings attached. There, however, is still a possibility of denuclearization after going through a partial comprise (scenario A). In such case, a grand bargain will be pursued that includes denuclearization, a peace treaty, and normalization of U.S.-North Korea relations.

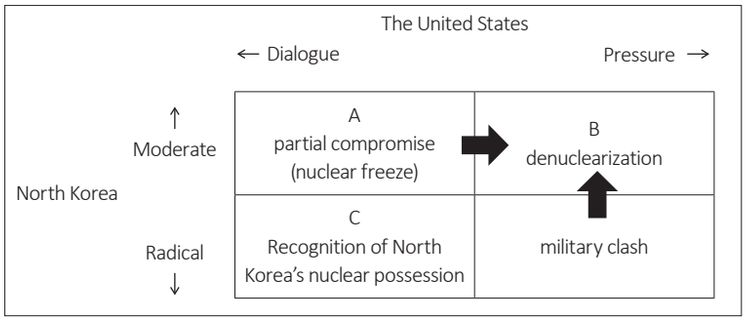
Scenario C (recognition of North Korea's nuclear possession) postulates the combination of the U.S. dialogue and the North's radical, under which the US recognizes North Korea as a de facto nuclear state. Such scenario, however, is not only directly contrary to the non-proliferation policy but also fails to guarantee the security of the U.S. alliances, including South Korea and Japan and exposes the continental US to nuclear threats. For these reasons, this scenario is unacceptable to the U.S.

Scenario D (military clash), is the worst case scenario, in which the U.S. pressure is in conflict with the North Korea's radical, escalating a military conflict. In this scenario, North Korea continues additional nuclear and ballistic missile tests and the U.S. considers a military response, such as a preemptive attack. Under such scenario, a local war could break out by the U.S. preemptive strike or decapitation operation Otherwise, North Korea could make provocations and China could get involved. Due to the explosive nature of such combination, not only the U.S. and North Korea but also China and South Korea would want to avoid it.

Overall, when judging on the basis of feasibility, recognizing North Korea as a nuclear power (scenario C) is the least possible scenario. Scenario B (denuclearization) is also less plausible in the short term, and scenario D is unrealistic as well. Scenario A (nuclear freeze), on the contrary, is relatively more feasible. In the meantime, scenario A (nuclear freeze) could be developed into scenario B (denuclearization). And transition from scenario D (military clash) to scenario B (denuclearization) also makes logical sense.

On the basis of desirability, the most desirable scenario is scenario B (denuclearization) and the second-best is scenario A (nuclear freeze). The least desirable scenarios are scenario D (military clash) and scenario C (recognition of North Korea's nuclear possession).

Picture 1. Scenarios of the U.S.-DPRK Relations



DIRECTION OF THE U.S.-ROK POLICY COORDINATION ON THE NORTH KOREAN POLICY

1. Basic Direction

The Trump administration's foreign policy has been adjusted according to the situation and a case, as opposed to being consistent in its principle and trajectory. Moreover, it has been difficult to effectively coordinate the U.S. and South Korean policies with South Korea's leadership vacuum. North Korea seizes this opportunity to speed up the advancement of nuclear and missile programs with the US and China working out their countermeasures of complex nature. President Moon Jae-in's government in South Korea should thus promptly set up a framework for policy cooperation with the US toward North Korea.

The core concern about the U.S.-ROK policy cooperation lies in possible 'Korea passing,' under which South Korea gets excluded or circumvented. There is also concern that the US and China make a strategic compromise with South Korea being excluded and its core interests being ignored, U.S.-North Korea talks taking place in full-scale, or the U.S. unilaterally taking the military measures. If relations between the US and North Korea make a rapid progress or conversely strain all of a sudden, South Korea could become a mere third party failing to have a close coordination with the U.S. Indeed, South Korea has a painful experience during the first North Korean nuclear crisis in 1994 when a military action against North Korea was discussed within the Clinton administration, and South Korea had to stand as an outsider when the U.S. and North Korea were holding a negotiation in Geneva.

Since the Moon administration took office, the U.S. and South Korea have been engaged in policy consultations. Matthew Pottinger, the U.S. National Security Council Director for East Asia, visited South Korea, followed by an announcement (by President Moon's spokesman, Yoon Young-chan) that South Korean and American officials had agreed on broad principles: 1) the ultimate goal is to completely dismantle the North Korean nuclear weapons, 2) to that end, both sides will employ all available means, including sanctions and dialogue, 3) dialogue with North Korea is possible when the circumstances are right, and 4) South Korea and the US will jointly pursue drastic and practical approaches to achieve these goals (Yonhap News Agency, May 16, 2017). South Korea and the U.S. coordinated their positions on a policy toward North Korea, during the visits to Washington of President Moon's Special Envoy Hong Seok-hyun (from May 17 to 20) and chief of the National Security Office Chung Eui-yong (from June 1 to 3).

Through ROK US consultations, including the forthcoming summit meeting, both countries need to coordinate their principle policies on the Korean Peninsula. Such coordination will cover the areas of the ROK and U.S., policy objectives, means to implement those policies, division of roles, and China's role.

First is about the aims and priority of policy toward North Korea. The U.S. is placing its priority on denuclearization. With its

primary focus on denuclearization, Washington sees other issues as subsidiary or long-term considerations. To South Korea, by contrast, as important on abjective as denuclearization are the peace settlement on the Korean Peninsula, an improvement in inter-Korean relations, a change in North Korea, and unification. Although Seoul shares the same goal with Washington of pursuing denuclearization, it has different aims in mind, more comprehensive by nature, such as a progress in inter-Korean relations and a creation of an environment in which unification can be realized. Despite a transfer of power in both countries, there still remains the difference in how they see the Korean Peninsula issues.

Therefore, South Korea and the U.S., with their primary focus on denuclearization, need to shape a common ground about the fact that denuclearization is related to other issues, such as anchoring peace on the Korean Peninsula, improving inter-Korean relations, and building a condition that ultimately leads to unification of the two Koreas.

The second salient point is means of policy. Policy means toward North Korea consists of measures of pressure and inducement. The former includes diplomatic offensives, economic sanctions, demonstration of military power, military intervention, deployment of strategic weapons, etc. The latter includes providing the economic incentives, guaranteeing the security, recognizing the legitimacy of regime, normalization of relations, etc. The means of policy between South Korea and the U.S. are asymmetrical, and such asymmetry makes the two countries hold different opinions in implementing policy toward North Korea. The U.S. can utilize various means of pressure and inducement at the same time. Washington not only has plenty of means of policy but also has abilities and network to actually mobilize them. On the contrary, policy measures that South Korea can take are limited both in type and size. Seoul is hesitant to exert military power because of military risk. The ROK also puts an emphasis on the economic incentives among the various means of inducement.

South Korea and the US should carefully sort out the means of pressure and inducement that can be mobilized for policy toward North Korea, and maximize its effect by dividing the roles. The two countries should run a cooperative system that leads to creating a synergy effect of means for North Korean policy, with a recognition of the existing gap between them in the means of policy available.

The third aspect is the division of roles between Washington and Seoul. This is about who is to take the initiatives on issues of the Korean Peninsula, how to divide the roles (good cop, or bad cop) in dealing with North Korea, and who is to take on the cost for negotiations with North Korea. The U.S. holds a position that it should seize the initiative in negotiations with North Korea and that South Korea should pay for the expenses. South Korea, by contrast, wants to take the lead and have an autonomy on the Korean Peninsula issues even though it recognizes the importance of the U.S. role. South Korea also hopes to play a mediating role and wants the US to 'play the villain' at times when it comes to dealing with North Korea. Seoul deems the cost of negotiations to be divided based on the roles and capabilities.

Even though South Korea is a steadfast ally of the U.S., it is not easy to reach an agreement on how to divide the roles on the Korean Peninsula issues. When imposing sanctions against or having negotiations with North Korea, the two countries are supposed to set a role of the main actor and the secondary actor, forge a partnership, acknowledge the relative autonomy of the partner, and build mutual trust. Under such strong partnership, they need to discuss the division of roles and costs case by case.

The fourth issue is about China's role. With China's status rising, its increasingly intense strategic competition with the U.S. is making the Korean Peninsula a battlefield for power struggle. Under such circumstances, China's role and respective policies on China are becoming sensitive matters between the US and South Korea.

The U.S. approaches the Korean Peninsula issue as part of the broad picture for strategic competition with China. South Korea, however, sees China from the perspective of China's policy toward the Korean Peninsula. For such reason, the US wants to restrain South Korea from leaning toward China. The ROK, however, has realistic concerns that it should maintain the basic U.S.-ROK alliance and at the same time seek China's cooperation on matters of unification. America has various means both of pressure and inducement toward China. The Trump administration is using the economic means as a leverage on the security (nuclear) issue. South Korea, by contrast, has little means of policy toward China and is rather vulnerable to China's pressure on diplomacy, economy and culture.

Based on the understanding of U.S.-China strategic competition, it is important to secure trust for the U.S.-ROK alliance. The two countries should coordinate their positions, based on such understanding, to set the level of expectation for China's cooperation, come up with measures to secure it, and make use of China's mediating role.

Table 2. Basic Direction of the U.S.-ROK Policy Coordination on the North Korean Policy

	U.S. Position	South Korea's Position	Direction of the U.S.-ROK Policy Coordination
Objectives and Priorities	Focusing on denuclearization	Focusing on various objectives, such as denuclearization, establishment of peace, changes in North Korea, progress in inter-Korean relations, unification, etc.	Emphasizing denuclearization, establishment of peace, progress in inter-Korean relations, creating condition for unification
Policy Means	Possessing various means of pressure and inducement	Limitation of means of pressure (mainly diplomatic pressure and economic sanctions, deferral of military actions) / focusing economic incentives	Dividing roles and seeking coordination between South Korea and the U.S. in the means of policy, making a synergy effect
Division of Roles	America-First principle, South Korea's cost-sharing	Emphasizing South Korea's initiative and autonomy, cost-sharing corresponding to roles and capabilities	Forging a partnership, acknowledging relative autonomy, building trust, dividing the roles and sharing costs case by case
China's role	Approaching the Korean Peninsula issue within the framework of U.S.-China strategic competition, preventing South Korea from leaning toward China, possessing policy means toward China (means of pressure and inducement in the field of diplomacy, economy, military)	Approaching China from the perspective of its policy on the Korean Peninsula, seeking cooperation of China for unification of Korea, limited policy means toward China, vulnerable to China's pressure (in diplomacy, economy, culture, etc.)	Understanding the characteristics of U.S.-China strategic competition, making consensus on setting the expectations of China, measures to collaborate with China, and application of China's role

2. Direction of the U.S.-ROK Policy Coordination by Issue

What follows next is to examine issues and alternatives of U.S.-ROK policy coordination on major issues related to North Korea and unification and find a solution to them.

A. Crisis Management on the Korean Peninsula

Even before the Moon administration starts to carry out its North Korean and unification policies, North Korea continues launching missiles, which has led to a discussion on placing stronger sanctions of the international community, including the US and the United Nations. If the crisis on the Korean Peninsula is not managed properly, a new policy vision is unlikely to find its footing. In order for the Moon government's policies to be implemented, it should first manage a crisis on the Korean Peninsula that could possibly be caused by further provocation of North Korean nuclear weapons, the U.S. deployment of strategic weapons on the peninsula, and North Korea's reinforcement of military reactions.

To that end, South Korea should primarily deter North Korea's provocation and be fully equipped with military readiness posture through the U.S.-ROK combined combat readiness, an enhanced trust on U.S. extended deterrence, and the deployment of U.S. strategic assets on the Korean Peninsula.

In addition, a crisis management manual should be materialized case by case in preparation for various provocations and threats by North Korea. North Korea's threat includes the 6th nuclear test, provocation through strategic arms including medium and long-range missile, conventional military provocation, and asymmetric provocation such as cyber terror. The manual should be categorized and differentiated by type of provocations. By doing so, we should prevent an escalation of crisis and devise effective counter-measures by type.

South Korea should also draw an agreement on moratorium, which stops North Korea's nuclear test and ballistic missile launches. In particular, the 6th nuclear test and long-range missile launch will make the US and the UN to tighten sanctions and pressure, and in turn make it hard for them to initiate a dialogue. Therefore, it is essential to make North Korea agree on moratorium of the 6th nuclear test and long-range missile launch. South Korea and the US need to seek policy coordination on providing responsive policy means, such as partial alleviation of sanctions and scaling back of the U.S.-ROK joint military exercise.

B. Drawing Road Map for Imposing Sanctions and Having Dialogue in Parallel

The way the nuclear and missile issue unfolds and how to resolve it increasingly determines the circumstances in Northeast Asia, including the Korean Peninsula, and inter-Korean relations. There should be a road map detailing ways to impose sanctions and pressure and have a dialogue at the same time. The road map needs to be very practical and effective by reflecting the fact that the North Korea's nuclear missile threats have become urgent with the current international sanctions in place and the past two nuclear negotiations with the North.

The nuclear issue used to be considered separately from the missile issue. However, since the recent North Korea's nuclear pursuit is closely related with the missile development, those two issues must be dealt with comprehensively. Also, in order to craft a road map for imposing sanctions and having a dialogue in parallel, there must be a comprehensive plan on how to use those two cards in a proper way. In other words, it should be taken into consideration what kind of sanctions and pressure should be imposed under which condition; when a dialogue should begin with North Korea; and how strict the sanctions should be in the process of the dialogue.

Moreover, preconditions and format of talks should be decided

in the phase of dialogue with North Korea. How to implement a multi-layered negotiation process, how to follow through the denuclearization process, and what kind of agenda should be dealt with are another elements that need to be considered as well.

First, the resumption of U.S.-DPRK 2.29 agreement (declaring a moratorium, allowing the IAEA investigation of nuclear facilities, and suspending enriched uranium activities) could be considered as a precondition of talks. In return, the adjustment of U.S.-ROK joint military exercise can also be discussed at the request of North Korea.

Second, various formats of dialogue need to be reviewed, such as holding U.S.-DPRK bilateral talks, resuming the six-party talks, and having three-party (US, China, and North Korea) talks. Inter-Korean talks can also be held at the right timing in the process of dialogue on North Korean nuclear issue.

Third, there are several issues to be dealt with in the negotiation process, which include denuclearization, missile issue, peace regime, normalization of North Korea's relations with the U.S. and Japan, and inter-Korean relations. There should be a plan that specifies the sequence of negotiation process and the way to connect them with one another.

Fourth, a road map for North Korea's nuclear missile issue should be put in place. There are several ways to resolve this issue. One is a phased approach to denuclearization, through moratorium and nuclear freeze. The other includes recognizing North Korea as a nuclear state, deploying tactical nuclear weapons, and developing nuclear weapons in South Korea. Even though the ultimate goal is the complete denuclearization of the Korean Peninsula, it is difficult to make North Korea completely surrender in the short-term and accept complete, verifiable, and irreversible dismantlement (CVID). Recognizing North Korea as a nuclear state, however, is an option on the opposite end of the spectrum that South Korea and the U.S. can never accept. Also, tactical nukes re-deployment could legitimize and implicitly acknowledge North Korea's nuclear possession. Moreover, realistically speaking, it is hard to develop nuclear weapons in South Korea despite the doubting voices about the reliability of U.S. nuclear umbrella.

Therefore, the second best alternative is to resolve North Korea's nuclear missile issue through stage by stage approach, starting with freezing its nuclear program (Mullen and Nunn, 2016). This option could become a mini-grand bargain, which restores the 2.29 agreement (Bong Geun Jun, 2017). Freezing North Korea's nuclear program must be the first step in the process of complete denuclearization and there must be a clear road map and action plan for it as well. With a grand bargain targeting denuclearization still in place, it is necessary to build a comprehensive plan for freezing nuclear program, shutting down nuclear facilities and programs stage by stage, and dismantling nuclear weapons. Especially, crafting a detailed plan of implementation is required so as not to break the implementation of denuclearization agreement. Furthermore, measures taken in every stage of denuclearization must be verified whether they are viable and effective and a detailed verification measure needs to be established accordingly.

Finally, it is necessary to create an implementation plan for a comprehensive agenda. If North Korea makes progress for denuclearization and dismantlement of its missile program, there should be a reward to reinforce North Korea's behavior. Their progress at every stage should be met with awards, such as guaranteeing the survival of the North Korean regime, establishing a peace regime on the Korean Peninsula, lifting economic sanctions, providing economic assistance, and normalizing the North's diplomatic relations with the U.S. and Japan. To that end, a comprehensive action plan on how to connect North Korea's behavior to rewards based on the action for action principle must be developed.

C. Virtuous Cycle of Nuclear Issue, U.S.-DPRK Relations and Inter-Korean Relations

A consensus should be built to resolve the North Korean nuclear issue and improve the U.S.-DPRK and inter-Korean relations. There are three approaches: 1) the North Korean nuclear problem and the U.S.-DPRK relations take precedence over others, 2) Inter-Korean relations should be prioritized, and 3) the consecutive parallel approach. Ever since the nuclear threats from North Korea have come to the fore, inter-Korean relations have been deeply related to how the North Korean nuclear situation unfolds. An improvement of U.S.-DPRK relations and inter-Korean relations are also closely connected. It is indisputable that the North Korean nuclear issue and U.S.-DPRK relations are factors affecting the inter-Korean relations. However, it is hard to argue that every issue of inter-Korean relations are related to the North Korean nuclear problem or U.S.-DPRK relations. There are some areas in inter-Korean relations that are relatively less related to the North Korean nuclear issue, which include humanitarian assistance and inter-Korean exchange and cooperation. It is true, however, that the inter-Korean relations cannot be addressed alone without considering the North Korean nuclear problem and U.S.-DPRK relations.

President Trump mentioned in an interview with NBC News that he doesn't mind President Moon having a dialogue with North Korea, but the two parties must have talks under certain circumstances (Yonhap News Agency, May 16, 2017). His statement indicates that the inter-Korean talks should be held with consideration for the status of North Korean nuclear development and U.S.-DPRK relations. It is clear that one of the major issues that South Korea and the U.S. face is handling the North Korean nuclear issue, U.S.-DPRK relations, and inter-Korean relations in a balanced way.

It is desirable to create a virtuous cycle of addressing those three issues consecutively. Measures to enable flexibility in inter-Korean relations should comprehensively encompass various factors, including the development of North Korean nuclear program, the types and degrees of North Korea's provocation toward the South, international sanctions against North Korea and its response to the sanctions.

The humanitarian assistance and social and cultural exchanges between the two Koreas should be sought to advance the inter-Korean relations even when the North Korean nuclear problem and U.S.-DPRK relations remain in a deadlock. Keeping the communications line open could be one alternative to sustain the inter-Korean relations in the face a deadlock. There are some measures that South Korea can unilaterally take to make that happen. For instance, the South Korean government allowed human exchanges and non-governmental group's assistance to the North, such as private sectors humanitarian assistance, religious groups' visit to the North. Private sector's assistance, since those are matters of humanitarian assistance, continue to be promoted irrespective of the North Korea nuclear missile issues and military tensions on the Korean Peninsula.

There are some areas that need to be coordinated and pursued jointly by the South and the North, which include humanitarian cooperation project, and social, cultural and sports exchanges. Sports exchanges, such as exchange of South and North Korea sports players and joint participation in sport events, can bring the warm breeze to the inter-Korean relations and it can start from the 2018 PyeongChang Winter Olympics. Moreover, the two Koreas can make an effort together for an inter-Korean dialogue by reopening the Panmunjom liaison channels and restoring formal and informal inter-Korean dialogue channels.

Should there be U.S.-DPRK bilateral talks and the six-party talks, some efforts could be followed to normalize the inter-Korean relations. The inter-Korean high-level or working-level talks can be held and several issues could be discussed such as alleviation of 5.24 measures, cooperation to improve the North Koreans' livelihood, re-

opening of Kaesong Industrial Complex, and resumption of the Mt. Kumgang tourism.

D. Ways to Change North Korea

There should be a strategic discussion between South Korea and the US about a way to set a direction of change and drive such change from North Korea. The prospects for North Korean regime change have been very contentious for a long time in academic circles and policy areas. There are three main streams on North Korea regime change: 1) unchangeable North Korean regime, 2) regime collapse of North Korea, and 3) mid-to-long term change made possible by an improvement in North Korea's human rights situation and the inflow of information. North Korea does not have a traditional form of planned economic system. There is a symbiotic coexisting relationship between the state and the market. Social inequality and regional imbalances have been created with the adoption of the market system. Individualism and materialism have become dominant in its society. Thus, the theory for unchangeable North Korean regime seems to be unreasonable. However, even though there are market economy and growing complaints about social inequality from the North Korean people, North Korea has managed to solidify its regime with the ideology, politics, and social control. Therefore, the assumption that North Korea will collapse in the near future is unconvincing.

To that end, understanding the trend of change under the Kim Jong-un regime is crucial and more should be done in that matter. There should be some measures, in the mid-to-long term, to support North Korea's market expansion, induce North Korea into opening its door, and promote reform. Not only that, more bilateral and multilateral efforts should be made to improve North Korea's human rights situation and expand inflow of information.

E. Establishing Peace on the Korean Peninsula and Unification

With regard to the unification process, one of the contentious issues is which should take precedence between establishing peace on the Korean Peninsula and achieving unification. People who argue for establishing peace on the Korean Peninsula primarily emphasize alleviation of military tensions and peace settlement on the Korean Peninsula. They aim for de facto unification made possible by establishment of peace on the peninsula, peaceful coexistence, and cooperation. On the other hand, those who argue for achieving unification first highlight the fact that unification is a fundamental way to eliminate the military tensions on the Korean Peninsula and remove the North Korean nuclear threats. They claim that transition of the Korean Peninsula to the peace regime is a pipe-dream when considering all the complex factors related to the establishment of peace regime on the Korean Peninsula, North Korea's hostility, and their possible cancellation of the agreement. Not only that, they also argue that North Korea uses the argument of bringing about peace to achieve North Korean-led unification and the withdrawal of United States Forces Korea. However, achieving unification inevitably goes through some uncertain and opaque process while establishing peace on the Korean Peninsula is an imminent issue.

South Korea and the US need to build a consensus on which issue should be handled first and what kind of relations those two issues have. It is desirable to settle peace on the Korean Peninsula by dealing with the North Korea nuclear issue, building mutual confidence in the military sector between the two Koreas, implementing arms control, and establishing the peace regime on the peninsula. The answer is to promote an environment for peaceful unification in the extended line with establishing peace on the Korean Peninsula.

Table 3. Direction of U.S.-ROK Policy Coordination by Issue

Issue	Review of Alternatives	Direction of U.S.-ROK Policy Coordination
Crisis Management on the Korean Peninsula	Strengthening of deterrence, having dialogue	Completion of military readiness posture, development of manual in response to North Korea's provocation case by case, moratorium on nuclear test and missile launch
Road map for imposing sanctions and having talks in parallel	Denuclearization, nuclear freeze, recognition of NK as nuclear state, re-deployment of tactical nuclear weapons, nuclear development in South Korea	*precondition of dialogue: resumption of 2.29 agreement *format of dialogue: U.S.-DPRK bilateral talks, three-party talks, six-party talks, etc. *gradual approach: aiming for denuclearization in phases (seeking grand bargain with gradual implementation of each phase), preparing a plan for implementing of agreement, developing verification measures *agenda: preparing for comprehensive agenda
Virtuous cycle of North Korean nuclear issue, U.S.-DPRK relations, and inter-Korean relations	Handling the North Korean nuclear issue and U.S.-DPRK relations first, dealing the South-North Korea relations first, handling all three issues in consecutive order	Handling issues in consecutive order, creating virtuous relations, having flexibility in the inter-Korean relations at every stage
Ways to change North Korea	Unchangeable North Korean regime, regime collapse of North Korea, North Korean change in the mid-to-long term	Marketization, opening up North Korea, reform, improving North Korea's human rights situation and inflow of information
Establishing peace on the Korean Peninsula and unification	Establishment of peace regime and de facto unification, establishment of peace on the Korean Peninsula through unification	Striving to settle substantial peace on the Korean Peninsula, promoting environment for peaceful unification

CONCLUSION

North Korea's nuclear and missile development is expected to pose a direct threat to the U.S security in the near future. The Trump administration can no longer sit back and watch North Korea's nuclear and missile threats. In this regard, there could be either a great compromise or the end point of conflict between the U.S. and North Korea. It seems obvious that at least relevant stake-holders, including the US, could no longer do nothing about North Korea's nuclear and missile pursuit. The circumstances of the Korean Peninsula will become more complicated in an unexpected manner with a new U.S. policy on North Korea, North Korea's response, and effects and counter-effects of major actors, including South Korea and China.

To that end, South Korea needs to be preemptively prepared on its policy considering various scenarios of U.S.-DPRK relations.

First of all, the Korean Consensus must to be developed. With a clear principle and policy, South Korea needs to coordinate its policy with the Trump administration. It also needs to pre-emptively and pro-actively promote the right environment, under which the principle and the policy can be implemented. The Moon Jae-in administration should provide a comprehensive vision and road map for denuclearization on the Korean Peninsula, U.S.-DPRK relations, and inter-Korean relations. Based on such vision, it has to strengthen cooperation with the US. Especially, building a consensus on the necessity of strong U.S.-ROK alliance is important to ensure concrete national security.

Second, the South Korean government needs to enhance the reliability of U.S. nuclear deterrence against North Korea for the sake of strengthening deterrence capability. It should reinforce cooperation with the U.S. for the deployment of THAAD battery and rotational deployment of U.S. strategic assets. Not only that, it is

necessary to speed up the completion of Kill Chain, the Korean Air and Missile Defense Systems (KAMD), and the Korea Massive Punishment and Retaliation (KMPR), the key countermeasures against North Korean nuclear and missile threats, so that its own deterrence capability can be strengthened.

Third, the ROK should support the U.S. and international efforts to toughen sanctions against North Korea for the short-term. However, diplomatic efforts should also be followed so that the US would not make any preemptive strike against North Korea.

Fourth, an ultimate goal of pressure and sanctions against North Korea is to resolve the North Korean nuclear missile issue in a peaceful manner. The ROK, therefore, needs to consider the possibility of U.S.-DPRK negotiation and make thorough preparations on conditions for resumption of US-DPRK negotiation, framework of talks, and agenda. In this way, South Korea will not be a bystander on U.S.-DPRK negotiation and can prevent any disadvantages in its national security.

REFERENCES

(Korean)

Cha, Du-hyun. 2017. “Review and Prospects of the Trump administration’s Policy toward North Korea.” Scenario and Outlook for U.S.-North Korea Relations. 2017 The 2nd Sejong Policy Forum.

Choi, Wooseon. 2016. “The Outlook for Trump’s Asia Policy.” Institute of Foreign Affairs and National Security (IFANS) Focus. 2016-54.

Chung, Jaehung. 2017. “U.S.-China Summit and South Korea’s Strategic Concern.” Sejong Commentary. No. 337.

Chung, Ku-youn. 2016. “The Trump Administration in Office and the Outlook for the Situation on the Korean Peninsula.” KINU Unification Plus. vol. 2. no. 4.

Chung, Sung-Yoon et al. 2016. Implications of North Korea’s Nuclear Advancement and Responsive Measures. Seoul: Korea Institute for National Unification.

Hong, Min. 2017. “Major Characteristics and Patterns of Nuclear and Missile Activities of the Kim Jong-un Regim.” Korea Institute for National Unification Online Series CO 2017-11.

Jo, Yanghyeon. 2016. “The Trump Administration’s Policy Toward Japan and the Outlook for U.S.-Japan Relations.” Institute of Foreign Affairs and National Security(IFANS) Focus. 2016-55.

Jun, Bong-geun. 2017. “Regional Politics and the ROK’s National Security in the Era of US-China Competition.” Institute of Foreign Affairs and National Security(IFANS) Focus. 2017-09.

Kim, Bo-mi. 2016. “North Korea’s No First Use of Nuclear Weapons: Its Background and Meaning.” The Journal of Strategic Studies. vol. 23, no. 3.

Kim, Hyun-wook. 2016. “Prospects for the Trump Administration’s Foreign Policy.” Institute of Foreign Affairs and National Security(IFANS) Focus. 2016-48.

Kim, Tae-woo. 2017. "Ways to Respond against North Korea's Nuclear Weapons in the Trump Administration." 2017 Outlook for the Inter-Korean Relations and Role of the National Unification Advisory Council. The 20th Expert Forum on Inter-Korean Relations.

Ko, Myung-hyun. 2017. "Trump's Diplomacy and Policy towards North Korea." The Asan Institute for Policy Studies Issue Brief. 2017-09.

Lee, Sang Hyun. 2017. "An Evaluation of U.S.-China Summit and Tasks for ROK-U.S. Relations." Sejong Commentary. No. 338.

Lee, Seok. "Impact of Sanctions on North Korean Economy." 2016. 2016 Forum on Korean Unification. Yonhap News Agency-Presidential Committee for Unification Preparation. 2016.5.27.

Park, JongChul. 2016. "Tasks and Strategies for the Korean Unification Diplomacy." Jung, Sungjang. et. al. ROK's National Strategy 2030: Unification. Sungnam: The Sejong Institute.

Seo, Jungkun and Taesuh Cha. 2017. "The Trump Administration and the Jacksonian Turn in US Foreign Policy." Korea and World Politics. vol. 33, no. 1.

Shin, Sung-won. 2016. "Trump's Cabinet Selections for National Security and Outlook for Foreign Policy." Institute of Foreign Affairs and National Security(IFNAS) Focus. 2016-50.

(English)

Acton, James M. 2017. "Can Trump Enforce His Red Line on North Korea?" Carnegie Endowment for International Peace."

Baker, Gerard, Carol E. Lee and Michael C. Bender. "Trump Says He Offered China Better Trade Terms in Exchange for Help on North Korea." Wall Street Journal. April 12, 2017.

Brooks, Rosa. "Donald Trump Has a Coherent Realist Foreign Policy." Foreign Policy. April 12. 2016.

Carter, Ash. "The Rebalance and Asia-Pacific Security: Building a Principled Security Network." Foreign Affairs. November/December 2016.

Chanlett-Avery, EmmaIan E. Rinehart, Mary Beth D. Nikitin, "North Korea: U.S. Relations, Nuclear Diplomacy, and Internal Situation," Congressional Research Service, January 15, 2016.

Dethomas, Joseph M. "Sanctions' Role in Dealing with the North Korean Problem." North Korea's Nuclear Futures Series. US.-Korea Institute At SAIS. 2016.

Fontaine, Richard and Robert Kaplan. 2016. "How Populism will Change the Foreign Policy?" Foreign Affairs.

Kwon, Bo Ram. 2016. "The Conditions for Sanctions Success: A Comparison of the Iranian and North Korean Cases." The Korean Journal of Defense Analysis. Vol. 28, No. 1.

Hecker, Siegfried S. "The U.S. Must Talk to North Korea." The New York Times. January 13, 2017.

Mccahill, William C. "Comrade Xi Meets Mister Trump: Summit or Base Camp?" The National Bureau of Asian Research Commentary. April 12, 2017.

Mead, Walter Russell. "Trump Plays the Trade Card for Help on North Korea." Hudson Institute. April 13, 2017.

Mullen, Mike and Sam Nunn. 2016. "A Sharper Choice on North Korea: Engaging China for a Stabel Northeast Asia." Independent Task Force Report No. 74. Council on Foreign Relations.

Sigal, Leon V. "North Korea: One Impulse for Trump to Heed." Arms Control Today. January/February 2017.

Sokosky, Richard and Joel Wit. "North Korea: A Vexing Problem for the New U.S. President." Carnegie Endowment for International Peace. January 12, 2017.

Walter Russell Mead. "Trump Plays the Trade Card for Help on North Korea." Hudson Institute. April 13, 2017.

DPRK Today.

Financial Times.

Fox News.

JoongAng Daily.

Korean Central News Agency.
Rodong Sinmun.
The New York Times.
Wall Street Journal.
Washington Post.
Yonhap News.

KOREA'S MISGUIDED EXTERNAL BEHAVIORS AND SECURITY DILEMMA IN EAST ASIAN POWER DYNAMICS

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Abstract

The paper explores what gives rise to a considerable opportunity cost and how to reduce it in Korea's security dilemma. Korea's misguided external behaviors with a disregard over power dynamics have accumulated a considerable opportunity cost. Not only THAAD dispute, and North Korea's threats, but Trump's isolationism shocked Korea to realize its external behavior as misguided. As a way to reduce the opportunity cost, the Korean government should incorporate the nexus, while remarking powers' economic relations with small-and-middle economies as a tool to attain their non-economic interests. Specifically, viewing China's behaviors with wariness, Korea should walk a realistic way by developing defense capability and consolidating alliance system, while reducing asymmetrical interdependence. Korea's THAAD deployment demonstrates its willingness to reject China's wishes and reduce the opportunity costs by shifting to a realistic way. The alliance system poses an important momentum to reshape the security dilemma. Unable to replace the alliance system, Korea has no choice but to spare some economic gains to the U.S. in return for getting security interests. Another way lies in actively participating in building an inclusive multilateral scheme of security and economic networks. Japan determines to rehabilitate moribund RCEP and TPP, whose aim is to counter China's expansionism by incorporating the nexus.

Key words: security dilemma, opportunity costs, Trump's isolationism, power dynamics, misguided external behaviors, incorporating or dismantling

INTRODUCTION

Korea's security dilemma becomes more burdensome mostly due to the reshaping powers relations and a spoiler. Trump's turn to isolationism risks to reorder East Asian region in Korea's disfavor. As represented by the Terminal High-Altitude Area Defense (THAAD) dispute, China would slacken the U.S.-Korea alliance system in order to build its long-envisioned Sino-centric bloc behind America's incomplete hegemony. North Korea's nuclear threats disturb not only the Korean Peninsula but the East Asian order.

Korea has long been heavily dependent on the U.S. in security, while depending on China in economy. Now, this survival strategy proves to be an outdated one, and is exacerbating Korea's security dilemma as U.S. and Chinese strategic interests collide with each other in East Asia. The THAAD deployment misguides China to cast doubt about Korea's deep involvement in an America-led anti-China network. How to manage the security dilemma is the centerpiece to guarantee the nation's security. The paper has much concern about an increase in Korea's opportunity costs incurred in the security dilemma, claiming that it results from misguided external behaviors unaware of the post-Cold War power dynamics. Most countries would reduce the opportunity costs throughout incorporating or dismantling the nexus of security and economic interests (hereinafter abbreviated as the nexus) in their favor.[1]

The Korean government inclined to dismantle the nexus in favor of liberalism when deciding its foreign policy directions. This unbalanced strategy risks an increase in opportunity costs from troubles in Korea's relations with the two powers. In truth, since the 2000s, Korea has considered China as an important economic partner, while loosening the alliance system. Korea has been unaware of the multi-faceted risks embedded in asymmetrical interdependence on China.[2] China's retaliation instigated by the THAAD deployment should be stressed as a part of opportunity costs accumulated throughout growing asymmetrical interdependence.

[1] See Wang Jisi, "China's Search for a Grand Strategy: a Rising Great Power Finds Its Way," Foreign Affairs, vol.90, no.2 (March/April 2011), pp.74-6; Manhee Lee, "Japan's Rethinking of Global Economic Security in Its Relations with the US," The Journal of East Asian Affairs, vol.28, no.2 (Fall/Winter 2014), pp.38-53; Man-Hee Lee, "Reconsidering Park Chung-Hee's Security Strategy in the Heavy and Chemical Industrialization," The 21st Century Political Science Review, vol.26, no.2 (June 2016), pp.229-36.

[2] Manhee Lee, "Reconsidering Korea's FTA with China in Its Economic Security," Pacific Focus, vol. XXX, no.3 (December 2015), pp.331-9.

By throw a blow to U.S. exceptionalism and by playing down bilateralism,[3] the Trump administration urges the Korean government to pay a considerable opportunity cost involving a fair burden-sharing for American forces and the revision of the FTA by complaining security and trade relations as unfair. Clearly, his isolationism manifests a part of the U.S. willingness to dismantle the nexus in its favor. By contrast, China has already incorporated the nexus since the mid-1990s as a way to practice an aggressive realism, the so-called "Going-out strategy".[4]

With the East Asian power dynamics in mind, the paper explores what gives rise to an increase in the opportunity costs and how to reduce it by reexamining Korea's misguided external behaviors since the 2000s. To this end, the paper will be organized as follows. The second section reviews what exacerbates Korea's security dilemma and examines its previous experiences. The paper puts an importance to the nexus as a counter over opportunity costs accrued by the security dilemma. The third section delineates the two powers' strategic interests in order to point out that Korea overlooked power dynamics around the Korean Peninsula. The fourth section explores Korea's misguided external behaviors which involve a considerable opportunity cost. The final section remarks that Korea should shift to a realistic posture and consolidate its security network largely through getting involved in multilateral power blocs and security cooperation networks including the U.S., Japan and interested middle-small powers as members.

[3] Leonid Bershidsky, "A blow to U.S. exceptionalism," The Japan Times (November 11, 2016), p. 11; David E. Sanger and Maggie Haberman, "Trump plays down US role in crises overseas," International New York Times (July 22, 2016), pp. 1, 5.

[4] Wang, "China's Search for a Grand Strategy: a Rising Great Power Finds Its Way," p.74; Wang Zhengyi, "China confronts Globalization," in Globalization and Economic Security in East Asia: Governance and Institutions, ed. Helen E. S. Nesadurai (London: Routledge, 2006), p.81.

REVIEW ON SECURITY DILEMMA AND KOREA'S EXPERIENCES

1. Security Dilemma in Hub-Spokes Relations

The security dilemma denotes the self-defeating aspect of the quest for security in an anarchic system. Even when the states do not intend to threaten each other's security, they cannot be sure of each other's present or future intentions. As a result, each tends to fear that the other may be or may become a predator. Their fears and uncertainties about other's intentions lead to a vicious cycle in which each accumulates more power for defense, along with the costs incurred in having acquired and having to maintain their power. The severity of the security dilemma can be regulated by both material and psychological factors.[5]

The security dilemma involves an opportunity cost in perpetuity. As a way to reduce it, most states seek to add more power by resorting to material and psychological factors in the form of a stronger defense capability, and alliance or partnership formation. Notably, the state consolidates alliance system and fosters a self-reliant defense capability while "incorporating" the nexus in the face of a vicious cycle and while "dismantling" the nexus in the presence of the dwindling security dilemma.

In East Asia, the alliance system has been built on multi-layered bilateralism like the hub-spokes relations rather than on multilateralism.[6] Once alliances began to form, the alliance security dilemma takes on a different character depending on "the relative dependence of the partners on the alliance" and "the degree of strategic

[5] Glenn H. Snyder, "The Security Dilemma in Alliance Politics," World Politics, vol.36, no.4 (July 1984), p.461; Shiping Tang, "The Security Dilemma: A Conceptual Analysis," Security Studies, vol.18, no.3 (October 2009), pp.595-8.

[6] S. Mahmud Ali, Asia-Pacific Security Dynamics in the Obama Era (London: Routledge 2012), pp.59-61.

interests among parties".[7] Most allies and partners have faced alliance game whenever the hub's strategic interests collide with those of the allies.

In retrospect, whenever the U.S. strategic interests collided with those of the allies and partners, it created troubles in hub-spokes relations. Hub failed to reduce spokes' dissatisfaction and resolve security dilemma.[8] The U.S. ultimate strategic goal in East Asia lies in preventing the emergence of an anti-status quo power largely throughout its security alliances and partnerships network.[9] In contrast to the Obama's rebalancing and pivot, the Trump's shift to isolationism collides with the interests of allies, thereby they cast doubt on the U.S. security commitment. To be sure, the U.S. has been willing to speak up only when Chinese actions threaten to impinge on its interests. But it has no interest in getting entangled in Asia's territorial feuds.[10]

When the U.S. would practice isolationism, it resorted to multilateralism over bilateralism by spearheading multilateral efforts to integrate great and middle powers into important international regimes, the so-called "all-inclusive strategy", while shouldering global obligation on them as stakeholders.[11] In doing so, the U.S. pressured the allies to undertake a fair burden-sharing with a leverage of its troop withdrawal as represented by Nixon Doctrine (1969) and Jimmy Carter's withdrawal policy (1975). Fundamentally, the U.S. has been reluctant to get involved in global troubles for fear of an automatic involvement over the conflicts overseas. It represents "the lesson of Vietnam War". America intended to obtain a free hand out of troubles in East Asia in the form of reallocation of military bases overseas.[12] In the allies' view, the U.S. withdrawal poses a gridlock to their alliance systems, whereby the allies lose a chance to add more material and psychological power. Korea views Trump's isolationism with wariness as a new signal of security dilemma.

2. Korea's Experiences: Security Dilemma and Opportunity Costs

Most states, specifically, small-to-midium sized states, face the vicious casual spiral cycle between fears, uncertainties, accumulations of more power and conflict in the power relations, which forces them to pay a considerable opportunity cost to appease it largely through an increase in defense expenses and realignment of the alliance system.

The depth of multi-faceted threats and reliability on alliance system poses an important determinant to shape the security dilemma. Lower threats and well-tied alliance system encourage most states to dismantle the nexus when they determine their foreign policy directions. The contrasting security environment prompts them to incorporate the nexus. The post-Cold War multi-faceted threats made most states sensitive to the security dilemma. As a way to reduce it, they shifted their foreign policy directions by incorporating the nexus as seen in China's "Going-out strategy" since the mid-1990s, the U.S. return to exceptionalism since terrorist attacks (September 2001) and Japan's Proactive Pacifism since the Senkaku Islands dispute (September 2010). Notably, the powers employ economic relations as a tool to secure non-economic foreign policy objectives.

In response to the loosened alliance system immediately following Nixon Doctrine and Jimmy Carter's withdrawal policy, and Bill

7 Snyder, "The Security Dilemma in Alliance Politics," pp.466, 471-2.

8 Ronald L. Tammen, et. al. Power Transition (New York: Chatham House Publishers, 2000), pp.27, 33-5.

9 James Steinberg and Michael E. O'Hanlon, Strategic Reassurance and Resolve: US-China Relations in the Twenty-First Century (Princeton: Princeton University Press, 2014), pp.30-71.

10 Brahma Chellaney, "Japan's Security Dilemma," The Japan Times (August 6, 2013).

11 Daniel W. Drezner, "The New New World Order," Foreign Affairs, vol.86, no.2 (March/April 2007), pp.40-3.

12 Kozi Murata, President Carter's U.S. Troops Withdrawal Policy from South Korea (Tokyo: Yuhikaku, 1998), pp.196, 239-44.

Clinton's turn to multilateralism (1993) incurred in his domestic economy first, Korea managed to appease the security dilemma by incorporating the nexus. Notably, the alliance system impacted so much when Korea determined to incorporate the nexus and reset its foreign policy direction. Throughout adjusting the nexus, the Korean government appeared to counter the security dilemma, specifically, by developing a defense capability largely through the Heavy and Chemical Industrialization (HCI) project. In a deeper reality, the project transcending the government capability bred an insurmountable opportunity cost involving endogenous political turmoil and economic insecurity, which resulted in the regime fall in October 1979.[13]

Bill Clinton's turning to multilateralism after the post-Cold War forced the Korean government to pay a considerable opportunity cost in the form of an increase in defense expenses and a fair financial burden-sharing for the American troops in Korea. The Korean government agreed to a burden-sharing and started to pay USD 150 million in 1991, increasing up to near USD 800 million in 2016.[14] A new opportunity cost dates to Bill Clinton's calling for "a-beneficiary-to-pay-principle" as a cost-saving measure in the face of domestic recession. His direction manifested a part of the America's willingness to play down bilateralism and less capability to preserve unilateralism against rivalries' challenges.[15]

The previous experiences suggest that the America's isolationism evoked multi-faceted fear and uncertainties to Korea's security. Getting entangled in the dilemma, Korea should pay a considerable opportunity cost as a way to add more power. More importantly, Korea's misguided liberalistic external behaviors unaware of East Asian power relations since the 2000s risked an increase in the opportunity cost, both economic and non-economic.

INTERESTS COLLISION IN EAST ASIAN POWER DYNAMICS

1. Collision of Strategic Interests in the Powers Relations

The post-Cold War regime gets entangled over multi-faceted troubles contrary to propositions regarding powers' post-Cold War deeds[16] and the thesis of a liberal world order created by rising democracy and global trading system[17]. East Asian order also remains not free from troubles among powers. James Steinberg and Michael E. O'Hanlon picture the East Asian powers' relations as a struggle for power extension. America has an interest in preventing the emergence of anti-status quo power through security alliances and partnerships. China has an interest in restoring its dominant power, the so-called Sino-centric Sphere, by securing sovereignty, unification and territorial integrity. Specifically, China considers global trade, access to natural resources, unimpeded access to vital sea-lanes and maritime resources as vital non-territorial interests.[18]

[13] Lee, "Reconsidering Park Chung-Hee's Security Strategy in the Heavy and Chemical Industrialization," pp.234-6.

[14] Korea's Ministry of Defense, "Bangwibibundankum (Financial Burden-Sharing)," http://www.mnd.go.kr (Accessed on June 15 2017).

[15] Karl K. Schonberg, Pursuing the National Interest: Moment of Transition in Twentieth-Century American Foreign Policy (London: Praeger, 2003), pp. 177-82; David P. Forsythe, "Global Leadership: American Exceptionalism in a Changing World Order," In Morton H. Jalperin; Jeffrey Laurenti; Peter Rundlet; Spencer P. Boyer, (Eds.), Power and Superpower: Global Leadership and Exceptionalism in the 21st Century (New York: Foundation Press, 2007), pp. 70, 85.

[16] Norrin M. Ripsman and T. V. Paul, Globalization and the National Security State (Oxford: Oxford University Press, 2010), pp.54-80.

[17] G. John Ikenberry, "The Illusion of Geopolitics: The Enduring Power of the Liberal Order," Foreign Affairs, Vol.93, No.3 (May/June 2014), pp.80-90.

[18] James Steinberg and Michael E. O'Hanlon, Strategic Reassurance and Resolve: U.S.-China Relations in the Twenty-First Century (Princeton: Princeton University Press, 2014), pp.30-71.

The East Asian powers still have an objective to maximize their national interests as represented by America's pivot and rebalance and China's long-envisioned Sino-centric bloc. Their interests collide more seriously than ever, whose dynamics can be illustrated as US-Japan-led encirclement over China by consolidating hub-spokes security framework and China's anti-encirclement by forging Eurasian links like the Shanghai Cooperation Organization (SCO).[19] They employed economic relations like FTA as a way to achieve their non-economic interests and to avoid a direct confrontation. Their economic networks such as U.S.-Korea, Australia and Singapore FTAs and TPP, and China-ASEAN (November 2004), Korea (June 2015) FTAs, and China-led SCO (April 1996) and Asian Infrastructure Investment Bank (AIIB) (June 2015) demonstrate a part of their willingness to embrace partners in return for getting their security cooperation transcending economic significance therein.

However, since Hu Jintao regime, China would not avoid a direct confrontation when implementing the aggressive realism as represented by Senkaku Island dispute (September 2010), re-demarcation of Air Defense Identification Zone (ADIZ, November 2013)) and Nine-dotted Line. In contrast to the Obama's administration, the Trump administration dismantles the nexus in realigning security alliances and partnerships system and reacts to China's threats in an inactive way. This risks an increase in Korea's security dilemma.

2. China's Creep towards Building a Sino-centric Bloc

By incorporating the nexus, China shifted its foreign policy direction from Bring-in strategy (defensive realism) to Going-out strategy (aggressive realism) since the mid-1990s. In realists' view, its ultimate interest lies in preventing the emergence of an anti-China network and in occupying the status as an unmatched hegemonic leader in East Asia. Henry A. Kissinger asserts that China's policy pursues two long-term objectives in East Asia: displacing the U.S. as the preeminent power in the Western Pacific and consolidating Asia into an exclusionary bloc deferring to Chinese trade and economic policy. China's neighbors, dependent as they are on Chinese trade and uncertain of the U.S. ability to react, might adjust their policies according to Chinese preference. Eventually, this could lead to the creation of a Sinocentric bloc dominating the western pacific.[20]

China's ambition dates back to its long-rooted security dilemma. China has a serious fear that an outside power or powers will establish military deployment around its periphery capable of encroaching on its territory or meddling in its domestic institutions.[21] Chinese strategic analysts observe four strategic rings of encirclement led by the U.S. and its alliances as serious threats to China's strategic interests. They doubt that the U.S. and its allies would deny supplies of oil and metal ores to China during a military or economic crisis and the U.S. Navy could block China's access to strategically crucial sea-lanes like a second Persian Gulf, the Asian Mediterranean.[22]

As a way to resolve the security dilemma, since the mid-1990s, China has attempted to build multi-layered bulwarks around its periphery by employing soft and hard powers as a leverage. It is called "a cabbage strategy", which shows China's aggressive realism. China's FTAs networking, SCO and AIIB, and the schemes of Regional Comprehensive Economic Partnership (RCEP) and Silk Road initiative demonstrates well its strategy without a direct confrontation with the

[19] Ali, Asia-Pacific Security Dynamics in the Obama Era, pp. 59-62.

[20] Henry A. Kissinger, "The Future of U.S.-Chinese Relations," Foreign Affairs, vol.91, no.2 (March/April 2012), pp. 45, 51.

[21] Kissinger, "The Future of U.S.-Chinese Relations," p.50.

[22] Andrew J. Nathan and Andrew Scobell, "How China Sees America: The Sum of Beijing's Fears," Foreign Affairs, vol.91, no.5 (September/October 2012), pp.38-9.

U.S. Its aim is to motivate the neighbors to defer to China's strategic interests by increasing their "asymmetrical interdependence" on it and serve China to build a Sino-centric sphere. Finally, higher dependence on the Chinese economy and resultant asymmetrical interdependence might undermine geographical balance in East Asia and the political autonomy of small neighboring countries.[23]

With soft power, China employs hard power as a way to extend its strategic interests, which also shows of its aggressive realism. The two large-scale wars in the Middle East offered China an opportunity to practice its aggressive realism.[24] With economic might, China has been bringing together an asymmetrical anti-access/area-denial capability strategy that could be sufficiently impressive to scare the U.S. off from intervening or provoking a confrontation in the region.[25] Chinese leaders emphasize the enhancement of this capability as a way to protect China's unimpeded access to vital sea-lanes and maritime resources. As a corollary, China plays brinksmanship to reduce its vulnerability to coercion as seen in a few backlashes, like territorial dispute in the East and South China Seas.[26] As is well-known, China's provocative actions depict well China's challenge to alter the U.S.-led East Asian order.

3. U.S. Inactive Reactions and its Aftermath

The U.S. considers the emergence of anti-status quo power as impinged on its strategic interest. America's interest collides with that of China, which turns into a power contest. As a way to guarantee the interests, the U.S. has still undertaken sustained efforts to build a far-flung system of multilateral institutions, alliances, trade agreement, and political partnership that lays the foundation of its leadership.[27] As suggested by the so-called rebalance to the Asia-Pacific, this engagement has persisted despite frequent predictions that the U.S. would cede its role as the main underwriter of security in the region.[28]

TPP and Free Trade Area of Asia-Pacific (FTAAP) were also initiated in diplomatic and security implications with economic significance therein.[29] To do rebalance, Washington is strengthening economic ties with the region because the economic destinies of the U.S. and the Asia-Pacific are intertwined. One of the most important initiatives regarding the rebalance is the TPP, which aims to bind the U.S. more closely together with eleven economies.[30] These behaviors portray, in part, U.S. exceptionalism that incorporates the nexus when deciding its foreign policy direction.[31] Despite the incorporation, America has failed to respond vigorously to the revisionist power's growing "anti-access/area-denial" capability, questioning its

[23] Hidetaka Yoshimatsu, The Political Economy of Regionalism in East Asia (New York: Palgrave Macmillan, 2008), p.22.

[24] Zhiqun Zhu, China's New Diplomacy: Rationale, Strategies and Significance (Burlington: Ashgate, 2013), pp.206-8.

[25] Aaron L. Friedberg, "Bucking Beijing: An Alternative U.S. China Policy," Foreign Affairs, vo.91, no.5 (September/October 2012), p.53.

[26] Steinberg and O'Hanlon, Strategic Reassurance and Resolve: US-China Relations in the Twenty-First Century, p.37.

[27] Ikenberry, "The Illusion of Geopolitics: The Enduring Power of Liberal Order," p.81; Karl K. Schonberg, Pursuing the National Interest: Moment of Transition in Twentieth-Century American Foreign Policy (London: Praeger, 2003), pp. 177-9.

[28] Ash Carter, "The Rebalance and Asia-Pacific Security: Building a Principled Security Network," Foreign Affairs, vol.95, no.6 (November/December 2016), p.66.

[29] Mike A. Mochizuki, "Seizi/annzennkyousotoFTAkatudou (Political-Security Dimensions of FTA Activities)," in AziataiheiyounoFTAkyousou (Competitive Regionalism: FTA Diffusion in the Pacific Rim) trans. by Okada, Ziro, eds. Solis, Mireya; Stallings, Barbara; Katada, Saori N. (Tokyo: Keisou Books, 2010), p.113; Steinberg and O'Hanlon, Strategic Reassurance and Resolve: US-China Relations in the Twenty-First Century, p.69; Michael Froman, "The Strategic Logic of Trade: New Rules of the Road for the Global Market," Foreign Affairs, vol.93, no.6 (November/December 2014), p.113.

[30] Carter, "The Rebalance and Asia-Pacific Security," p.67.

[31] In regards to exceptionalism, see David P. Forsythe, "Global Leadership: American Exceptionalism in a Changing World Order," in Power and Superpower: Global Leadership and Exceptionalism in the 21st Century, eds. Morton H. Halperin, Jeffry Laurenti, Peter Rundlet and Spencer P. Boyer (New York: The Century Foundation Press, 2007), pp.71-5.

willingness to meet long-standing security commitment.[32]

By contrast, the Trump administration dismantles the nexus as a way to practice Americanism. The administration scraps the U.S. involvement in free trade system, while declaring its withdrawal from the TPP deal and urging the revision of the FTAs. Donald J. Trump misses deeper implications underlying the FTAs. More worrisome, he urges the allies to undertake a fair burden-sharing by employing a leverage of its troop withdrawal. His isolationism puts an importance on the lesson of the Vietnam war and Kissinger's economic-security interests linkage strategy. One of the U.S. national security doctrines is to enjoin U.S. allies capable of providing for their own security to do just that. The final piece of a new U.S. military doctrine should be to put an end to free-riding, the so-called fair burden-sharing.[33]

Moreover, the America behaves inactively in preventing China from attempting to make a military build-up combined with U-shaped claim. This behavior exacerbates East Asian spokes' security dilemma. As a way to appease small-middle powers, the Trump administration deploys its sea power and initiates anti-China joint exercises, while urging China to ensure the unfettered navigation in the South China Sea. However, it fails to counter a few states to lean toward China. Furthermore, the moribund TPP fuels allies and partners to cast doubt about the U.S. security commitment. A few ASEAN states are unsure if America will back them up in a conflict with China and realizes that they will have to live with and get along with China in perpetuity. Mostly due to China's soft power and "salami slicing" approach, they are turning away from the U.S. and turning into China. Now, they think that they can rely on China for their security and economy as well.[34]

Unable to recognize these power dynamics, Korea misinterpreted the multi-faceted liberalism, which increased the opportunity cost.

KOREA'S MISGUIDED EXTERNAL BEHAVIORS AND OPPORTUNITY COSTS

1. Unaware of Multi-faceted Features of Liberalism

The globalization coincided with a renaissance of neo-liberal thinking. Traditionally, liberals consider democracy and free trade as antidotes to war. A disease of war could be successfully treated with those twin medicines. Free trade was a means to bring about the end of war. Trade would create relations of mutual dependence which would foster understanding between peoples and reduce conflict. Interdependence would replace national competition and defuse unilateral acts of aggression and reciprocal retaliation. Notably, liberals consider interdependence and liberal institutionalism as an effective way to pacify the international order.[35]

However, it comes under question if growing interdependence and liberal institutions propelled by globalization have been successful in promoting a pacific international order. Liberals miss a deeper reality. Robert O. Keohane and Joseph S. Nye note the concept of sensitivity and vulnerability in interdependence underlying power relations. It is asymmetries in dependence that are most likely to provide sources of influence for actors in their dealing with

[32] Mac Thomberry and Andrew F. Krepinevish Jr., "Preserving Primacy: A Defense Strategy for the New Administration," Foreign Affairs, vol.95, no.5 (September/October 2016), pp.26-7.

[33] Andrew J Bacevich, "Ending Endless War: A Pragmatic Military Strategy," Foreign Affairs, vol.95, no.5 (September/October 2016), pp.38, 42.

[34] Frank Ching, "China carrot-and-stick strategy reaping results," The Japan Times (November 8, 2016), p.8; Mark J. Valencia, "Behind Manila's pivot to China," The Japan Times (October 31, 2016), p.8.

[35] Scott Burchill, The National Interest in International Relations Theory (New York: Palgrave Macmillan, 2005), pp. 112, 119-20; Ripsman and Paul, Globalization and the National Security State, pp.21-5.

one another. Less dependent actors can often use the interdependent relationship as a source of power in bargaining over an issue and perhaps to affect other issues. Vulnerability is particularly important for understanding the political structure of interdependence relationships. The vulnerability asymmetries run strongly in favor of powers.[36]

As liberals recognize, trade, especially import, determines how much leverage a country gets from offering or denying other countries' access to its markets.[37] Asymmetries of interdependence are used for political advantages and are the foundation of state power.[38] The power employs trade policy as a way to increase its economic significance and attain its foreign policy objectives as follows: promote its relative power position, and change a specific aspect of another nation's military, social, or political behaviors, and achieve long-term political, ideological and security objectives with the short-term economic costs of such policy.[39]

Trapped in liberalism, the Korean government was unware of a deeper power dynamic underlying interdependence. Interdependence does not necessarily guarantee nations', specifically small-middle nations', security. Asymmetrical interdependence risks an increase in the opportunity costs of small-middle nations when a great power employs it as a way to attain non-economic objectives. This guides that Korea should take a balanced posture between liberalism and realism when it increases interdependent relationships with powers, specifically, with those of different political regimes,

[36] Robert O. Keohane and Joseph S. Nye, Power and Interdependence (Glenview, Illonois: Scott, Foreman and Company, 1989), pp.10-16.

[37] Arvind Subramanian, "The Inevitable Superpower: Why China's Dominance is a Sure Thing," Foreign Affairs, vol.90, no.5 (September/October 2011), p.67.

[38] Joel Rathus, Japan, China and Networked Regionalism in East Asia (New York: Palgrave, 2011), p.24.

[39] Mark Herander, "International Trade Relations, Trade Policy, and National Security: The Role of Economic Analysis," in Economics and National Security, ed. Jim Leitzel (Oxford: Westview Press, 1993), p.95.

as a survival strategy. However, the government overlooked a considerable opportunity cost embedded in growing interdependence and dismantled the nexus.

2. Mismatched External Behaviors by Dismantling the Nexus

As seen in <Table 1>, the post-Cold War order characterizes power contest among the powers. With growing interdependence, the eventualities such as Asian Financial Crisis and two large-scale wars in the Middle East offered China to extend its power overseas and to challenge the status-quo in East Asia under the banner of Going-out strategy.[40] Angered by 9/11 terrorist attacks, the U.S. also shifted its foreign policy direction from isolationism to exceptionalism and attempted to realign multi-layered bilateralism as a way to counter China's expansionism. So did Japan directly after the Senkaku Islands dispute. Spurred by exogenous eventualities, the powers commonly incorporate the nexus. Specifically, they would employ economic instruments like asymmetrical interdependence in trade as a way to attain their non-economic objectives.

[40] Man-Hee Lee, "A New Cold War in Japan-China Competition Toward ASEAN: Political Dimension of FTA," The 21st Century Political Science Review, vol.26, no.2 (September 2015),pp.183-4.

Table 1. Two Powers' Strategic Preferences, and Japan's and Korea's Behaviors

Preferences/ Eventualities	Preferences		Behaviors	
	America	China	Japan	Korea
The end of the cold war	- Isolationism and withdrawal from East Asia - Oriented to Multilateralism playing down Bilateralism	- Bring-in strategy (defensive realism)	- Independent Relations with the U.S. by dismantling the nexus - A strategic partnership with China	- Interdependent relations with the U.S. depending on alliance system
Asian Financial Crisis		- Oriented to Going-out strategy (aggressive realism)		- Dismantles the nexus - Extends intra-Koreas exchanges
Iraq and Afghanistan Wars immediately following 9/11 Terrorist Attacks	- Integrating the nexus of political and economic interests - Turn to interventionism and consolidating multi-layered bilateral alliances and partnerships	- More proactivism and expansionism by relying on soft and hard powers - Employing financial power and FTA as tools to add more power (AIIB) - Attempts for geo-economical/ political reordering	- Independent and cooperative relations with the U.S. by checkbook diplomacy and logistical supports	- Dares to be independent with U.S.(trouble over the rights to wartime operation and the idea of power balancer) and to be economically interdependent with China -Sunshine policy by holding summit meetings and extending economic exchanges
Senkaku Islands Dispute	- Interventionism - Pivot toward East Asia and rebalancing - Employing FTA as a tool realign alliances and partnerships (TPP)		- Oriented to interdependent relations with the U.S. by integrating the nexus - Joining into the TPP and the constitutional reinterpretation	- Reoriented to interdependent relations with U.S. and China (FTA) - Tilts toward China in economy - Rigid posture toward North Korea
Re-demarcation of ADIZ and Nine-dotted Line	- Trump's shift from intervention to isolationism by dismantling the nexus as seen in Americanism	- More aggressive realism toward a building of the exclusionary Sino-centric Sphere	- Oriented to independent relations with US by self-reliant rearming and departing from the cold war regime	- Interdependent with US in security and China in economy - Rigid posture toward North Korea - Facing China's retaliations over THAAD deployment

Note: Man-Hee Lee, "Japan's Security Bills in the Relations with Korea," The Korean Journal of Japanology, vol.105 (November 2015), p.94.

Unaware of multi-faceted liberalism, the Korean governments could not see through power dynamics and in consequence dismantled the nexus as seen above. They ignored the "East Asian paradox" as seen in "the sunshine policy" under Kim Dae-jung (February 1998-February 2003) and Roh Moo-hyun (February 2003-February 2008) administrations. Without a political consideration, they believed that intra-Koreas growing interdependence could be conducive to confidence-building and peaceful unification, giving North Korea a huge financial donation and aid, and visiting North Korea's leader. They loosened the U.S.-Korea alliance system in their favor as seen in troubles over the rights to wartime operation and initial idea of Korea's role as a power balancer. In the aftermath, North Korea spared much time and fund able to develop nuclear weapons and long-range ballistic missiles which pose a serious threat to Korea's and East Asian security.

Overlooking China's aggressive realism, most governments tilted toward China as a way to secure economic interests. Fueled by it, Korea could establish a FTA with China in June 2015. What worries us is asymmetrical interdependence therein which can be employed as a disproportionate political clout when China aims to

attain its non-economic objectives. Likewise, the former President Park Geun-hye's participation at the Chinese Peoples' Liberation Army's parade in September 3 2015 demonstrated her willingness to dismantle the nexus with a priority on economic interest. The U.S. government cast much doubt about her behavior as leaned toward China, which rendered the alliance system somewhat questionable. North Korea's fourth nuclear test in January 2016 impacted Korea to realize a serious security dilemma and its foreign direction as futile. However, the government did not pay much attention to a considerable opportunity cost embedded in growing asymmetrical interdependence on China until the THAAD dispute occurred.

3. A Considerable Opportunity Cost: Economic and Non-economic Burdens

Korea's behaviors proved inappropriate and contrastingly fueled the security dilemma to exacerbate. Remote from the realistic power dynamics, most governments behaved to risk an increase in the opportunity costs by misinterpreting multi-faceted liberalism. The cost can be categorized into economic and non-economic burdens. The former includes an increase in defense expenses and financial burden-sharing for the America's forces in Korea. The latter includes multi-faceted threats accrued by troubles in Korea-U.S. and China relations. These are closely interconnected with Korea's misinterpreted liberalism.

The security dilemma following the America's withdrawal during the Cold War forced Korea to pay a considerable opportunity cost. The rate of increase in defense spending hit a peak of 59.7% in 1976, which demonstrates a part of opportunity cost caused by Nixon Doctrine and Jimmy Carter's withdrawal policy. Interestingly, the rate after the 2000s began to drop, registering 4% in 2017. The lowered rate manifests Korean decision makers' liberalistic posture partially unaware of an increase in opportunity cost incurred in power dynamics. By contrast, the financial burden-sharing for American troops in Korea increased up to 5.3 times from 1991 to 2016.[41]

More burdensome economic opportunity cost will spring from the Trump's isolationism and Korea's growing asymmetrical interdependence on China. President Donald J. Trump continuously urges allies to share a fair financial burden with a leverage for the American troop withdrawal by complaining the alliance system as unfair. American responsibility to defend others should extend only to friends and allies unable to defend themselves. The core issue here is not affordability, though one may wonder why US taxpayers and soldiers shall shoulder burdens that others are capable of shouldering. Exercising global leadership is to nurture a community of like-minded nations willing and able to stand on their own.[42]

Henry A. Kissinger's strategy to link economic and security interests will continuously dominate the U.S.-Korea financial burden-sharing consultation in the Trump's administration.[43] The U.S. may urge Korea to increase defense spending with an excuse of its expenses as much as 3.26% of GDP. If Korea does not accept the America's requests, he would pose a U.S. troop withdrawal intertwined with protectionism in order to control Korea's behavior.

Apart from economic loss immediately following the THAAD dispute, Korea's asymmetrical interdependence on China poses a considerable opportunity cost including serious threats to economic security and Korea-U.S. alliance system. In truth, Korea nearly lost a free hand in the face of China's retaliation. When China employs economic relations like trade as a clout, it forces Korea to

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41 The Ministry of Defense, "kukbangyesanchui (The Trend in Defense Budget)," (http://www.mnd.go.kr) (accessed on June 22, 2017).

42 Andrew J. Bacevich, "Ending Endless War: A Pragmatic Military Strategy," Foreign Affairs, Vol.95, No.5 (September/October 2016), p. 42.

43 Yoshimasa Muroyama, Nitibeianpotaisei (The Security System in US-Japan Relations) (Tokyo: Yuhikaku, 1992), pp.519-23.

pay a considerable opportunity cost. Undoubtedly, China's bashing Korea will continue until Korea defers to its wishes. Worrisome, Korea faces China's retaliation when leaned toward the U.S., which damages Korea's autonomy. The U.S. calls into question the alliance system when Korea dismantles the nexus, which also increases the opportunity cost. In short, liberalistic posture has a limit to satisfy the two powers and in consequence risks Korea to be isolated from them.

Regrettably, the Korean government failed to get a lesson from the Senkaku Islands dispute. The dispute demonstrated that Japan lost a free hand over China mostly due to asymmetrical interdependence piled up over the years. In 2010, Japan's dependence on China rose up to 19.4% in export, 22.1% in import respectively.[44] When China wielded the clout, Japan realized its opportunity cost promoted by naïve liberalism and patchwork realism[45] as burdensome and determined to foster a defense capability and to return to the Yoshida Doctrine as a way to reduce the cost.

What is more worrisome is that Korea's misguided behaviors without a considerable political consideration increases an insurmountable non-economic opportunity cost like less reliability in the alliance system, furthermore, a threat to sovereignty. Korea's leaning toward China renders the alliance system questionable in the America's view. In truth, as represented by Korea's inactive cooperation regarding the THAAD deployment, troubles over the rights to wartime operational control and the idea of Korea's role as a power balancer in East Asian power dynamics, the loose alliance system endangered Korea-U.S. relations to fall into a vicious cycle just as China wishes.

[44] Japan's Ministry of Internal Affairs and Communication, Statistical Yearbook 2004, pp.458-71.

[45] Hidetaka Yoshimatsu, Japan and East Asia in Transition (New York: Palgrave Macmillan, 2003), p.147.

Korean must keep in mind that since the Nixon Doctrine, the United States has shifted its strategy from "two and a half" to "one and a half" wars, by which it meant to undervalue Korea's geopolitical position and to fear an automatic involvement over East Asian region.[46] Donald J. Trump undervaluing the forward deployment of American troops and playing down bilateralism shows America's reluctance to get involved. Korea's misguided behaviors risked driving the U.S. troops to withdraw, which posed a threat to Korea's survival, furthermore, to sovereignty. Viewing it with wariness, a foreign press warns Korea's insurmountable opportunity costs accrued by the loosen alliance system as follows:

> China's embrace of Korea is part of a long-term strategy to turn it into a subordinate state in terms of foreign and national security policy (much as Finland kowtowed to the Soviet Union in the cold war). And yet though courted by all sides in the struggle to maintain stability in Northeast Asia, Korea now runs the risk of becoming isolated. Korea's elite appears to be splitting into pro-Chinese and pro-American factions that transcend party lines. Korea's economic strength seems to have produced an illusion of policy independence that is opening a chasm between their allies. However, Korea will gain little, and risk much, if he downgrades his alliance tie in favor of commercially motivated, if unofficial, neutrality. Whatever short-term benefits, Korea will receive more than offset by his strategic vulnerabilities vis-à-vis China.[47]

Likewise, the loosened alliance system could pose a threat to territorial sovereignty. Robert D. Kaplan expects Korea to be dependent on a Greater China and the role of U.S. forces to be diminished after a unified Korea[48] and Charles K. Armstrong predicts incoming

[46] Murata, President Carter's U.S. Troops Withdrawal Policy from South Korea, pp.304-9.

[47] Yuriko Koike, "High cost to new neutrality," The Japan Times (July 19, 2014).

[48] Robert D. Kaplan, "The Geography of Chinese Power: How Far Can Beijing Reach on Land and at Sea," Foreign Affairs, vol.89, no.3 (May/June 2010), p. 32.

territorial disputes between the two countries[49] and also warns of Korea's insurmountable opportunity cost when Korea-U.S. alliance system is loosened. North Korea's continuous provocative actions despite international sanctions and China's threats to Korea's sovereignty as represented by the THAAD dispute manifests a part of an opportunity cost from the loosen alliance system.

Fortunately, as a means to reduce the opportunity cost, the Korean government decided to reset the loose alliance system as seen in the U.S.-Korea agreement on a condition-based approach in determining the operational control of alliance forces in the event of war in 2014 and on the deployment of an advanced missile defense battery, called THAAD in July 2016.[50] The government's resolution to withdraw from the Kaesong industrial complex in February 2016 also shows its willingness to reduce the opportunity cost by incorporating the nexus. In a similar way, Korea decided to deploy the THAAD despite China's retaliations.

CONCLUSION

The paper explores what gives rise to a considerable opportunity cost and how to reduce it in Korea's security dilemma. Korea's misguided external behaviors with disregard over power dynamics have accumulated considerable opportunity cost since the 2000s. Trump's isolationism causes the cost to rise and imposes great pressure on Korea's autonomy. The Korean government misinterpreted multi-faceted liberalism, while overlooking power contest among the stakeholders. As represented by the sunshine policy towards North Korea, growing asymmetrical interdependence toward China and loose alliance system, Korea was unaware of a considerable opportunity cost underlying its policy and made a great mistake to dismantle the nexus. The misguided behaviors pushed the opportunity cost upward. Not only THAAD dispute, and North Korea's threats but Trump's isolationism shocked Korea to realize its external behavior as misguided.

The East Asian order gets entangled in multi-faceted power dynamics. China transforms asymmetrical interdependence into a clout when practicing its long-envisioned non-economic objectives. China encompasses the Nine-dotted Line in the South China Sea as a part of its domain. As represented by the THAAD dispute, China will continuously bash Korea until the U.S.-Korea alliance slackens and Korea defers to its ambition. North Korea's threats loom larger over time, which forces Korea to pay a considerable opportunity cost.

As a way to reduce the cost, Korea should rearrange its regulating mechanism as follows. By correcting misinterpreted liberalism, the Korean government should incorporate the nexus, while marking powers' economic relations with small-to-middle sized economies as a tool to attain their non-economic interests. Specifically, viewing China's behaviors with wariness, Korea should follow a realistic way by developing a defense capability and consolidating the alliance system, while reducing asymmetrical interdependence. As long as China recognizes North Korea as a part of its bulwarks against outside powers, it will wield a free hand to protect North Korea in perpetuity. Disappointed at China's posture toward North Korea's nuclear threats, the Korean government determined to deploy the THAAD. Korea's behavior demonstrates its resolution to reject China's wishes and reduce the opportunity costs by shifting to a realistic way.

The alliance system gives an important momentum to shape an opportunity cost. In truth, the U.S. isolationism posed a serious

[49] Charles K. Armstrong, "Sino-Korean Border Relations," in Beijing's Power and China's Borders, eds. Bruce Elleman, Stephen Kotkin and Clive Schofield (New York: M. E. Sharpe, 2013), pp. 119-21.

[50] Carter, "The Rebalance and Asia-Pacific Security," p.69.

security dilemma to Korea. Likewise, the Trump's isolationism will urge Korea to pay a considerable opportunity cost including a fair burden-sharing for U.S. forces in Korea and an improvement in trade surplus. One must keep in mind that these requests can easily intertwine with each other. His behavior illustrates that he would dismantle the nexus as a way to practice the Americanism, which renders bilateralism somewhat questionable. Unable to replace the alliance system, Korea has no choice but to spare some economic gains to the U.S. in return for getting security interests. It can be a cost-saving way to purchase sophisticated weapons in America's market and promote joint R & D in the defense area.

Another way lies in actively participating at a multilateral scheme of security and economic cooperation and forging a security cooperation network involving the interested countries. Since the post-Cold War, multidimensional mutual reassurance and confidence-building measures were developed to stabilize the East Asian order, but failed to share common interests.[51] Ash Carter considers "principled and inclusive security networks" as more important. The network evolves from some pioneering trilateral mechanism beyond bilateral alliance and partnership, via East Asian states' own cooperation without the U.S. to creating multilateral security architecture through the ASEAN Defense Ministers Meeting-Plus.[52] Japan determines to rehabilitate moribund RCEP and TPP, whose aim is to counter China's expansionism.

[51] See Shin-wha Lee and Hyun Myoung Jae, "Building a Northeast Asian Community," in Advancing East Asian Regionalism, eds. Melissa G. Curley and Nicholas Thomas (London: Routledge, 2007), pp.79-87.

[52] Carter, "The Rebalance and Asia-Pacific Security," p.73.

REFERENCES

Ali, S. Mahmud. Asia-Pacific Security Dynamics in the Obama Era. London: Routledge, 2012.

Armstrong, Charles K. "Sino-Korean Border Relations," In Beijing's Power and China's Borders, edited by Bruce Elleman, Stephen Kotkin and Clive Schofield. New York: M. E. Sharpe, 2013.

Bacevich, Andrew J. "Ending Endless War: A Pragmatic Military Strategy," Foreign Affairs, vol.95, no.5 (September/October 2016), pp.36-44.

Bershidsky, Leonid. "A blow to U.S. exceptionalism," The Japan Times (November 11, 2016), p. 11.

Burchill, Scott. The National Interest in International Relations Theory. New York: Palgrave Macmillan, 2005.

Carter, Ash. "The Rebalance and Asia-Pacific Security: Building a Principled Security Network," Foreign Affairs, vol.95, no.6 (November/December 2016), pp.65-75.

Chellaney, Brahma. "Japan's Security Dilemma," The Japan Times (August 6, 2013).

Ching, Frank. "China carrot-and-stick strategy reaping results," The Japan Times (November 8, 2016), p.8.

Drezner, Daniel W. "The New New World Order," Foreign Affairs, vol.86, no.2 (March/April 2007), pp. 34-46.

Forsythe, David P. "Global Leadership: American Exceptionalism in a Changing World Order," In Power and Superpower: Global Leadership and Exceptionalism in the 21st Century, edited by Morton H. Halperin, Jeffry Laurenti, Peter Rundlet and Spencer P. Boyer. New York: The Century Foundation Press, 2007, pp.69-75.

Friedberg, Aaron L. "Bucking Beijing: An Alternative U.S. China Policy," Foreign Affairs, vol.91, no.5 (September/October 2012), pp.48-58.

Froman, Michael. "The Strategic Logic of Trade: New Rules of

the Road for the Global Market," Foreign Affairs, vol.93, no.6 (November/December 2014), pp.111-8.

Herander, Mark. "International Trade Relations, Trade Policy, and National Security: The Role of Economic Analysis," In Economics and National Security, edited by Jim Leitzel. Oxford: Westview Press, 1993.

Ikenberry, G. John. "The Illusion of Geopolitics: The Enduring Power of Liberal Order," Foreign Affairs, vol.93, no.3 (Mya/June 2014), pp.80-90.

Japan's Ministry of Internal Affairs and Communication. Statistical Yearbook 2004, pp.458-71.

Kaplan, Robert D. "The Geography of Chinese Power: How Far Can Beijing Reach on Land and at Sea," Foreign Affairs, vol.89, no.3 (May/June 2010), pp.22-41.

Keohane, Robert O. and Nye, Joseph S. Power and Interdependence. Glenview, Illonois: Scott, Foreman and Company, 1989.

Kissinger, Henry A. "The Future of U.S.-Chinese Relations," Foreign Affairs, vol.91, no.2 (March/April 2012), pp. 44-55.

Koike,Yuriko. "High cost to new neutrality," The Japan Times (July 19, 2014).

Korea International Trade Association. Korea's Major Trading 10 Countries (http://stat.kita.net/stat/kts) (date accessed May 11, 2015).

Korea's Ministry of Defense, "Bangwibibundankum (Financial Burden-Sharing)," http://www.mnd.go.kr (Accessed on June 15 2017).

Lee, Manhee. "Japan's Rethinking of Global Economic Security in Its Relations with the US," The Journal of East Asian Affairs, vol.28, no.2 (Fall/Winter 2014), pp.38-53.

Lee, Man-Hee. "Reconsidering Park Chung-Hee's Security Strategy in the Heavy and Chemical Industrialization," The 21st Century Political Science Review, vol.26, no.2 (June 2016), pp.219-42.

Lee, Manhee. "Reconsidering Korea's FTA with China in Its Economic Security," Pacific Focus, vol.XXX, no.3 (December 2015), pp.320-43.

Lee, Man-Hee. "A New Cold War in Japan-China Competition Toward ASEAN: Political Dimension of FTA," The 21st Century Political Science Review, vol.26, no.2 (September 2015), pp.175-94.

Lee,Man-Hee. "Japan's Security Bills in the Relations with Korea," The Korean Journal of Japanology, vol.105 (November 2015), pp.91-108.

Lee, Shin-wha and Hyun, Myoung Jae. "Building a Northeast Asian Community," In Advancing East Asian Regionalism, edited by Melissa G. Curley and Nicholas Thomas. London: Routledge, 2007.

Mochizuki, Mike A. "Seizi/annzennkyousotoFTAkatudou (Political-Security Dimensions of FTA Activities)," In AziataiheiyounoFTAkyousou (Competitive Regionalism: FTA Diffusion in the Pacific Rim) trans. by Okada, Ziro, edited by Solis, Mireya; Stallings, Barbara; Katada, Saori N. Tokyo: Keisou Books, 2010.

Murata, Kozi. President Carter's U.S. Troops Withdrawal Policy from South Korea. Tokyo: Yuhikaku, 1998.

Muroyama, Yoshimasa. Nitibeianpotaisei (The Security System in US-Japan Relations). Tokyo: Yuhikaku, 1992.

Nathan Andrew J. and Scobell, Andrew. "How China Sees America: The Sum of Beijing's Fears," Foreign Affairs, vol.91, no.5 (September/October 2012), pp.32-47.

Rathus, Joel. Japan, China and Networked Regionalism in East Asia. New York: Palgrave, 2011.

Ripsman, Norrin M. and Paul, T. V. Globalization and the National Security State. Oxford: Oxford University Press, 2010.

Sanger, David E. and Haberman, Maggie. "Trump plays down US role in crises overseas," International New York Times (July 22, 2016), pp. 1, 5.

Schonberg, Karl K. Pursuing the National Interest: Moment of Transition in Twentieth-Century American Foreign Policy. London: Praeger, 2003.

Snyder,Glenn H. “The Security Dilemma in Alliance Politics,” World Politics, vol.36, no.4 (July 1984), pp.466, 471-2.

Steinberg, James and O’Hanlon, Michael E. Strategic Reassurance and Resolve: US-China Relations in the Twenty-First Century. Princeton: Princeton University Press, 2014.

Subramanian, Arvind. “The Inevitable Superpower: Why China’s Dominance is a Sure Thing,” Foreign Affairs, vol.90, no.5 (September/October 2011), pp.66-78.

Tammen, Ronald L. et. al. Power Transition. New York: Chatham House Publishers, 2000.

Tang, Shiping. “The Security Dilemma: A Conceptual Analysis,” Security Studies, vol.18, no.3 (October 2009), pp.595-8.

The Japan Times (August 6, 2013).

Thomberry, Mac and Krepinevish Jr.,Andrew F. “Preserving Primacy: A Defense Strategy for the New Administration,” Foreign Affairs, vol.95, no.5 (September/October 2016), pp.26-35.

Valencia, Mark J. “Behind Manila’s pivot to China,” The Japan Times (October 31, 2016), p.8.

Yoshimatsu, Hidetaka. Japan and East Asia in Transition. New York: Palgrave Macmillan, 2003.

Yoshimatsu, Hidetaka. The Political Economy of Regionalism in East Asia. New York: Palgrave Macmillan, 2008.

Wang, Jisi. “China’s Search for a Grand Strategy: a Rising Great Power Finds Its Way,” Foreign Affairs, vol.90, no.2 (March/April 2011), pp.63-82.

Wang, Zhengyi. “China confronts Globalization,” In Globalization and Economic Security in East Asia: Governance and Institutions, edited by Helen E. S. Nesadurai. London: Routledge, 2006.

Zhu, Zhiqun. China’s New Diplomacy: Rationale, Strategies and Significance. Burlington: Ashgate, 2013.

AGENCY CONFLICT AND THE END OF STRATEGIC PATIENCE

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Abstract

With the end of the second Obama administration, strategic patience towards North Korean nuclear programs came under fire. Pyongyang has strengthened its nuclear capabilities with multiple tests and, to the dismay of Washington, Beijing has shied away from pressing Pyongyang to denuclearize. Drawing on principal-agent theory, this study aims at understanding the critical shortcomings of strategic patience. A principal delegates authority to an agent in the hope that the agent will solve a problem more efficiently and effectively with its expertise. However, the initial delegation of power and authority inherently offers the agent room to pursue its own interest and behave opportunistically. Parsing out the divergence of interests between Beijing and Washington in Pyongyang’s nuclear capabilities and examining four United Nations-sponsored sanctions, this paper argues that China’s vested strategic and economic interests in North Korea have left Beijing opposed to strict design and implementation of sanctions against Pyongyang.

Key words: principal-agent relations; strategic patience; the United States; China; North Korea

INTRODUCTION

Strategic patience, the U.S. policy toward North Korean nuclear weapons program under the Obama administration, has come under crossfire. It has stood on three basic principles: first, the United States should wait patiently until the opponent commits genuine steps towards denuclearization; second, Washington should ratchet up sanctions in response to Pyongyang's nuclear provocations; and third, the People's Republic of China (hereafter PRC) should exercise its economic and political leverage over the Democratic People's Republic of Korea (hereafter DPRK) for denuclearization, the shared goal of the United States and the PRC. To the dismay of Washington, Pyongyang has shown no sign of change, simply building up its nuclear arsenal; a series of sanctions have never broken Pyongyang's determination to acquire nuclear armament; and Beijing has been reluctant to use Pyongyang's economic dependence as a lever to encourage denuclearization. Pointing out North Korea's augmented nuclear and missile capabilities, critics of strategic patience, including new President Donald Trump, assert that the Obama administration has had no strategies in the works to resolve the threat of nuclear proliferation and that the policy has been no more than a strategic abandonment of this important issue (Bosworth and Gallucci2013; Choi 2016; Kim 2016). In unison they call for a shift away from Obama's policy, while they all differ in alternatives.

The primary goal of this paper is to examine the shortcomings of strategic patience, focusing on Washington's unwarranted expectation that China should rein in North Korea's nuclear ambition. For this purpose, this study relies on the framework of principal-agent theory (hereafter P-A theory), which is frequently used in studies of business organizations, legislatures, and international institutions (Alchian and Demestz, 1972; Fama, 1980; Moe, 1984; McCubbins and Schwartz, 1987; Kiewiet and McCubbins, 1991; Pollack, 1997; Nielson and Tierney, 2003). According to the theory, a principal delegate authority to an agent in the hope that the agent's expertise will allow it to solve a problem more efficiently and effectively. However, the initial delegation inherently entails difficult challenges for the principal. The central problem is shirking: the agent has ample incentives to behave opportunistically, pursuing its own interests, as the interests of principal and agent never completely coincide.

P-A theory provides useful insights into relations between states even when there exists no explicit delegation of authority, if one is heavily dependent on another to resolve an issue. China and the United States have had no formal contract to denuclearize North Korea. However, for the sake of this internationally agreed-upon goal, Washington has acknowledged Beijing's special status with regard to Pyongyang. For a diplomatically and economically isolated, impoverished North Korea, China is its sole ally, largest trading partner, and source of food and energy. At the risk of oversimplification, China is North Korea's lifeline. Therefore, Washington has concluded that China is the only country capable of exercising effective control over North Korea's misbehaviors. However, what Beijing has done so far to curb North Korea's aspirations for nuclear armament has come short of Washington's expectations. China has vetoed attempts at pushing North Korea into a corner even while it has voted for sanctions against North Korea's nuclear and missile provocations.

Shirking as a result of interest divergence between Washington and Beijing provides an interesting explanation of the gap between Washington's expectations and Beijing's reluctance to exercise leverage. Denuclearization is the top priority of Washington's policy towards Pyongyang. Beijing shares this interest in a nuclear-free North Korea. However, it has other complex and nuanced interests in North Korea. Basically, China wants North Korea to survive. China fears that tight international sanctions against North Korea may destabilize the regime and lead to a South Korean takeover, with

political and economic repercussions detrimental to China's interests in the region.

This paper unfolds as follows. First, it reviews existing studies explaining China's reluctance or incapability to restrain North Korea's nuclear and missile provocations. Second, it discusses the origin of strategic patience and the validity of applying P-A theory to analyze U.S. policy toward North Korea, distinguishing between Washington's and Beijing's priorities concerning North Korea's nuclear capabilities. The third section shows how China has diluted the design and implementation of U.N.-sponsored sanctions against North Korea's nuclear tests, examining four U.N. sanctions since 2006. Note that this study does not cover United Nations Security Council Resolution 2321 of 30 November 2016, the most recent response to North Korea's fifth nuclear test, conducted 9 September 2016. This paper concludes with two suggestions for the new administration in dealing with North Korea: first, that Washington design and implement tighter oversight mechanisms if it still means to rely on China to rein back North Korea's nuclear drive, and second, that Washington deal with Pyongyang directly, because the new administration can no longer afford to ignore mounting threats from North Korea's recent remarkable progress in nuclear and missile capabilities.

EXISTING LITERATURE

What explains China's incapability of stopping North Korea's nuclear ambitions or its reluctance to exercise influence over its rogue client? Among many studies of Sino-DPRK relations, two arguments draw attention. One highlights China's reluctance to rein in North Korea's misbehaviors, while another focuses more on the inherently limited leverage China has over North Korea.

The first argument premises "soft-balancing": great powers' efforts to dilute the preponderance of the United States in international politics after the end of the Cold War (Pape 2005; Paul 2005). This staggering power asymmetry has discouraged potential competitors from balancing directly against the United States (Wohlforth 1999). Instead, other great powers accept the current balance of power but seek to obtain better outcomes within it. According to Walt, soft balancing is "the conscious coordination of diplomatic action in order to obtain outcomes contrary to US preferences, outcomes that could not be granted if the balancers did not give each other some degree of mutual support (Walt 2011)." To defend their interests, other great powers veto the United States' unilateral actions in international scenes. Their goal is to combine their diplomatic assets to limit the ability of the United States to impose its preferences on others (Walt, 2011). From this perspective, Beijing has been engaging in soft-balancing by making the best use of the nuclear standoffs between Pyongyang and Washington. The proliferation threat will force the United States to divert its efforts and resources to deal with North Korea (Horowitz 2015). Thus China has little incentive to be actively engaged in resolving the crisis and little reason to press North Korea to the point of denuclearization. In fact, the PRC has opposed the United States' unilateral use of coercive means, urged it to go through a multilateral framework, and allowed North Korea room to breathe by loosely designing and enforcing sanctions and by expanding economic interactions behind the curtain.

As the theorists of "soft-balancing" suggest, China may be enjoying the prolonged conflict of the United States against North Korea's nuclear programs. After all, the primary target of the weapons is the United States. Washington has to invest a huge amount of resources in dealing with North Korea, which is notoriously unpredictable and unreliable. However, this perspective pays little attention to how Pyongyang's nuclear programs hurt Chinese national interests.

For one thing, a series of outright violations of the nuclear nonproliferation regime and of many U.N. Security Council resolutions have compromised China's reputation as a great power. How can China be considered a superpower when it continually fails to stop bad conduct by a small power heavily dependent on it? In addition, North Korea's nuclear provocations have invited stronger ties of Japan and South Korea with the United States and created space for a larger and more active U.S. military presence. In other words, propping up the North Korean regime and overlooking its programs to create weapons of mass destruction have been costly to China.

Another school of thought contends that China's leverage over North Korea is inherently limited. Indisputably, North Korea has been dependent on China for aid, investment, and trade. Growing economic dependence has highlighted the leverage Beijing may possess over Pyongyang (Noland 2007). However, this school is of the opinion that economic dependence does not automatically translate into actual leverage over North Korea's domestic and foreign policies (Chung and Choi 2013). Whether an external actor can exercise leverage partly depends on the nature of specific issues. Regime survival is at stake in North Korea's development of nuclear weapons (Kim 2011). The regime has pursued the program for two decades or longer while subjecting its population to extreme deprivation (Kissinger 2006). The high priority of the issue makes the regime very resistant to foreign pressure, even from a friend. Thus, a growing number of Chinese scholars and policymakers have pointed out very cautiously that China's influence over North Korea has been diminishing (Won 2013). The best example is the interview with Mr. Cui Tiankai, the Chinese ambassador to Washington, published in the July/August 2013 edition of Foreign Affairs. Cui remarked that "the DPRK could choose not to listen to us though we [China] do have some influence there as neighbor and long-standing friend. Our influence over the DPRK may not be as real as what is reported in the media (Foreign Affairs July/August 2013)."

The biggest problem of this second school of thought is that it too easily dismisses the latent influence that China possesses. China's importance to North Korea cannot be overstated. It has often used its economic leverage over Pyongyang to bring about policy change. For example, Pyongyang returned to diplomacy when Beijing turned off the oil valve in response to Pyongyang's refusal to reopen dialogue about denuclearization through the Six-Party Talks. The PRC also suspended the shipment of food and oil after the DPRK's third nuclear test and when it signaled a fourth nuclear test. Taken together, this evidence suggests that lamenting the PRC's lack of leverage over the DPRK is merely an attempt to deflect international criticisms of its lack of will.

THE PRINCIPAL-AGENT FRAMEWORK

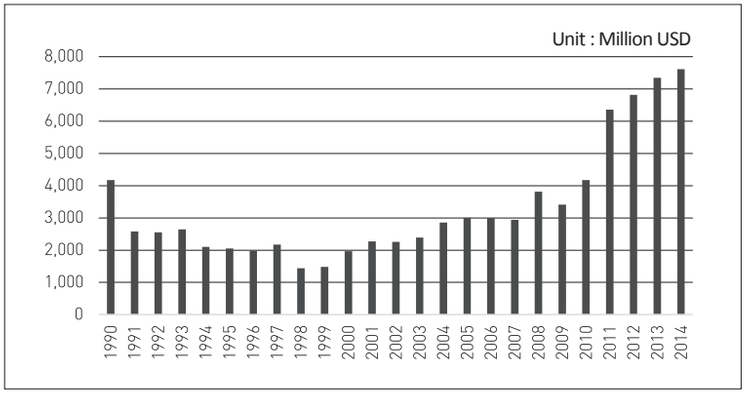
The basic assumption of P-A theory is that a principal delegates power and authority to an agent in the hope that it can perform a task more effectively and efficiently because it has expertise. For example, states create international institutions to handle health and trade issues on a global scale. The legislature delegates power to bureaucrats to implement laws enacted. Owners of private companies hire chief executive officers. However, the initial delegation of power and authority inherently contains two problems. First, the interests of principal and agent never completely coincide. What if the agent has interests systematically distinct from those of the principal and uses its delegated power to pursue its own preferences at the expense of those of the principals? This "shirking" emerges as the central problem in principal-agent relations. Second, "slippage" occurs when the structure of delegation itself provides perverse incentives for the agent (Nielson and Tierney 2003). The need to delegate authority may give the agent powers that can be used against

the principal. In any principal-agent relationship, the agent is likely to have more information about itself than others have, making control or even evaluation by the principal difficult (Pollack 1997). The principal seems to be at a permanent disadvantage.

The P-A model has been frequently discussed in studies of economic organizations, Congress-bureaucrat relations, and state–international organization relations. Its basic idea can be applied to state-state relations when a state seeks another state's help in resolving a problem. The U.S. call for the PRC to help denuclearize North Korea resembles task delegation from principal to agent. Thus, strategic patience has been interpreted as "outsourcing" North Korean policy to the (it is hoped) more adept leadership of the PRC (Ohn and Richey).

Originally, the Obama administration tried to denuclearize North Korea through diplomacy. The Leap Day Agreement of 29 February 2012 was a good example. After a series of bilateral meetings, the DPRK and the United States agreed to resume the Six-Party Talks. North Korea promised to halt uranium enrichment and missile testing as well as put its nuclear sites back under international monitoring, while the United States, in return, committed to 240,000 tons of food aid, at an estimated cost of $200–250 million (Cordesman and Linn 2015, p. 246). During the meetings, the U.S. negotiators orally warned that any missile testing, including testing under the guise of a peaceful satellite launch, would violate the terms of the agreement (Cordesman and Linn 2015, p. 247). However, Pyongyang ignored the message. In less than two months after the announcement of the agreement, the DPRK conducted a satellite launch and also revised its constitution with a clause proclaiming itself a nuclear armed state. In response, the United States suspended food aid and canceled all diplomatic overtures. Strategic patience reflects the sentiment of disappointment and betrayal from Washington that Pyongyang has no genuine interest in dialogue and uses diplomacy as a way to buy time for its weapon programs. Therefore, instead of engaging North Korea directly, the United States has expected China to restrain North Korea's ambition. Diplomats and politicians in Washington have publicly acknowledged that Beijing has political and economic leverage to rein in Pyongyang, while Washington has virtually none. For example, Senator John McCain, influential in foreign policy making in Washington, once noted, "The most and key element in all this is China. China is the only country that can affect North Korean behavior. They [the PRC] can shut down in a short period their [the DPRK] economy (Solomon 2013b)." In similar way, John Kerry, the Secretary of State under the second Obama administration, urged, "Beijing should put some teeth into its policy of a nuclear free Korean Peninsula (Solomon 2013a)." Later he repeated the call, saying "It is now in China's own interests to rein in North Korea (Page 2013)."

Figure 1. North Korea's trade volume 1990–2014



Source: Korea Trade-Investment Promotion Agency, 2014 Nyŏn Pukhan Taeoemuyŏk Tonghyang (Seoul, Korea: KOTRA, 2015)

There are a couple of conditions under which a state can translate its economic ties into leverage over a partner's domestic and foreign policies: first, the target state must lack alternative economic interactions; and, second, the target country must be unable to re-

taliate with its own costly sanctions (Drezner 2009, pp. 18-19). In these terms, Washington's belief that Beijing is the only actor with a strong leverage over Pyongyang is well founded. North Korea is economically and politically isolated. Its total volume of trade with foreign countries has not exceeded 7.7 billion dollars in any year of the 21st century, as Figure 1 above indicates. China is the largest trading partner of this hermit kingdom, accounting for virtually 90% of North Korea's total trade volume, as Table 1 below suggests. For China, the share of trade with North Korea is merely 0.16% of its total trade in 2014.

Table 1. Ten largest trading partners of the DPRK 2015

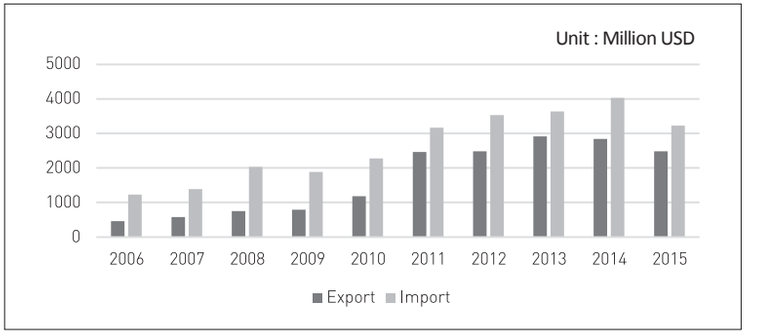
Unit : Million USD

Country	Exports of the DPRK	Imports of the DPRK	Export-Import Total	Share
China	2,484.0	3226.4	5710.4	91.34
Russia	6.0	78.3	84.3	1.35
India	22.7	53.8	76.5	1.22
Thailand	6.9	43.1	50.0	0.81
Ukraine	2.0	33.7	35.7	0.57
Taiwan	29.8	0.1	29.9	0.48
Singapore	1.3	28.4	29.7	0.48
Philippines	5.9	16.0	21.9	0.35
Pakistan	20.8	0	20.8	0.33
Hong Kong	14.9	5.0	19.9	0.32

Source: Korea Trade-Investment Promotion Agency, 2015 Nyŏn Pukhan Taeoemuyŏk Tonghyang (Seoul, Korea: KOTRA, 2016)

Figure 2 and Table 2 below also show the trade surplus Beijing has enjoyed over Pyongyang. Some scholars have pointed out that this surplus has actually represented the scale of aid to North Korea (Haggard and Noland 2009, p. 231). China is also a major source of economic aid to North Korea for food and energy. Particularly since 2005, North Korea's economic dependence on China has been growing deep. In addition, China is North Korea's one and only ally: no other country has maintained relatively regular high-level governmental exchanges with the DPRK throughout the twenty-first century.

Figure 2. The DPRK trade with the PRC, 2006–2015



Source: Korea Trade-Investment Promotion Agency, 2015 Nyŏn Pukhan Taeoemuyŏk Tonghyang (Seoul, Korea: KOTRA, 2016)

Table 2. The DPRK's Trade Balance with China, 2006–2015

Unit : Million USD

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
-764	-811	-1,279	-1,094	-1,089	-701	-1,043	-719	-1,181	-743

Source: Korea Trade-Investment Promotion Agency, 2015 Nyŏn Pukhan Taeoemuyŏk Tonghyang (Seoul, Korea: KOTRA, 2016).

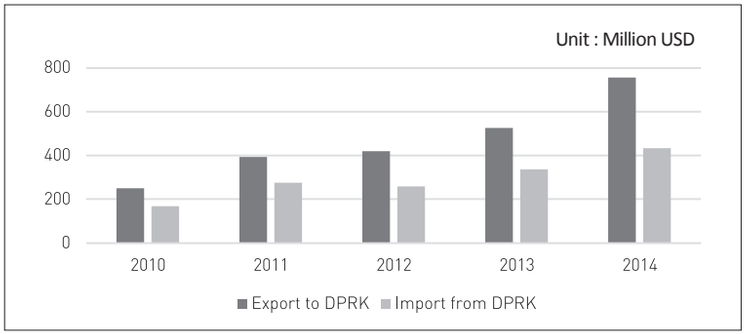
Both the United States and China share interests in a nuclear-free Korean Peninsula. Washington attaches top priority to the complete, verifiable, and irreversible denuclearization of Pyongyang, and Beijing has adamantly opposed Pyongyang's nuclear programs. China understands well the negative security implications of North Korea's nuclear weapons program. First of all, North Korea's provocations have already prompted the United States, Japan, and South Korea to strengthen defense coordination. Second, North Korea's

nuclear weapons could invite an arms race in East Asia, including nuclear armament of Japan and South Korea. Moreover, if more countries develop nuclear weapons, the nuclear nonproliferation treaty could collapse, injecting new uncertainties into the security situation across the globe and undermining Chinese interests (Glaser and Billingsley 2012). Lastly, Pyongyang's growing nuclear capabilities may invite preemptive military interventions by Washington, which would certainly lead to the demise of the Kim dynasty and might drag Beijing into military conflict with Washington.

Given China's close relationship with North Korea and the convergent interests in nonproliferation, China will remain a key factor in any U.S. policy aimed at eliminating North Korea's nuclear capabilities. However, the two large powers have substantial divergence of interests and differences in ordering of priorities. The hierarchy of Chinese interests is well reflected in Beijing's three-no policy: "no war, no instability, and no nukes (Glaser and Billingsley 2012)." Eliminating nuclear weapons ranks last on the list; China will support denuclearization strategies only if they do not jeopardize peace and stability on the peninsula. Basically, what China wants is the survival of North Korea, which is still a useful buffer against the South and two more formidable adversaries, Japan and the United States. A fall of the incumbent leadership in Pyongyang would give momentum to reunification under Seoul's control. In that case, more than 25,000 American troops and their military installations already deployed across South Korea would be likely to advance north to the border with China.

The PRC's economic interest in the DPRK is also substantial. Economic cooperation with Pyongyang has been a part of Beijing's strategy for economic development of its northeastern provinces, particularly Jilin and Liaoning. Leaders in Beijing have encouraged local government and Chinese companies to expand their interactions with North Korea by providing diplomatic support, infrastructure projects, and investment capital (Reilly 2014, p. 917). With the support from the central government, Jilin, for example, has expanded economic interactions with North Korea between 2010 and 2014 as figure 3 below indicates. Since 2005, the number of Chinese companies starting business with North Korea has been burgeoning as table 3 below suggests. Now, many Chinese companies have business with North Korea. And, North Korea has become an important source of natural resources such as coal, iron, and other minerals for Chinese industry. Tightly designed and strictly implemented UNSC-sponsored sanctions would hurt not only the North Korean economy but many different Chinese economic actors as well. In addition, any instability inside North Korea induced by strong sanctions will produce a massive flow of refugees, disrupting economic and social order across northeastern China.

Figure 3. Jilin's trade with the DPRK, 2010–2014



Source: Su-yeon Ham, "2016 Nyŏn Sangbangi Pukhan-Jilin Muyŏk Tonghyang," December 7, 2016, http://news.kotra.or.kr/user/globalBbs/kotranews/21/globalBbsDataView.do?setIdx=252&dataIdx=156048

Table 3. New Starts of Chinese Joint Venture in DPRK, 2005-2011

	2005	2006	2007	2008	2009	2010	2011
Manufacturing	2	11	6	0	5	6	7
Mining	3	11	6	3	5	4	1
Textile	1	1	4	1	2	1	3
Seafood	0	0	4	0	0	2	5
Transportation	0	3	1	0	1	0	0

Source: James Reilly, "China's Economic Engagement in North Korea," China Quarterly 220 (2014): p. 926.

In short, Pyongyang's nuclear ambition undermines Beijing's interests in East Asia and across the globe, yet attenuating the lifeline to the Kim dynasty may open a Pandora's box of troubles including the loss of economic opportunities and a valuable strategic buffer. This dilemma explains China's ambivalence toward North Korea: China has supported U.N.-sponsored sanctions as a token of its opposition to North Korea's nuclear programs, while it has opposed tight sanctions and actual enforcement, as a sign of its support for the survival of its small ally.

SANCTIONS

North Korea's first nuclear test, 2006

Pyongyang conducted its first nuclear test on 9 October 2006 despite warnings from Washington and Beijing. China criticized the test with a very vitriolic statement: North Korea had "ignored universal opposition of the international community and flagrantly conducted the nuclear test. … The Chinese government resolutely opposed it (Xinhua News Agency 9 October 2006)." The term "flagrantly" (hanran) is normally reserved for serious affronts to the nation's dignity by historical rivals or enemies (Song 2011, p. 1146). Later, China supported the passage of UNSC Resolution 1718 imposing trade and travel sanctions on North Korea.

It seemed that China was standing with other members of the international community in penalizing North Korea's provocation. In fact, the PRC urged world great powers not to push the DPRK too hard. For example, it agreed to the resolution only after revisions removed requirements for tough economic sanctions beyond those targeting luxury goods. And it adamantly opposed the U.S. proposal to respond militarily to the crisis by invoking Chapter 7 of the United Nations Charter.

North Korea's second nuclear test, 2009

Defying international warnings, North Korea conducted its second nuclear test in May 2009. The United Nations responded to this provocation by passing UNSC Resolution 1874. The major elements of sanctions included blocking funding for nuclear and missile activities through targeted sanctions on additional goods, persons, and entities on top of the previous one in 2006, widening the ban on arms imports-exports, and calling on member states to inspect and destroy banned cargo to and from North Korea – on the high seas, at seaports and airports – if they have reasonable grounds to suspect a violation (Glaser 2009, p. 4). Voting in favor of the resolution, China again seemed to participate in sanctioning North Korea's nuclear provocation—but repeatedly called on the international community to remain calm and respond in a "coolheaded and appropriate way." During U.N. deliberations, China opposed the demand put forward by the U.S., the U.K., and France for all states to mandatorily search North Korean ships suspected of carrying illicit cargo. The resolution ended up merely "calling on" states to carry out such inspections to ensure that North Korea comply with the weapons ban (Glaser 2009, p. 3). Following the adoption of UNSCR 1874, China's Foreign Ministry's spokesperson emphasized that

China supports sanctions not to punish Pyongyang but to persuade it to reconsider its actions and return to negotiations (Glaser 2009, p. 3). Beijing also allowed Pyongyang to evade the U.N. sanctions by routing trade and financial transactions through China (Niksch 2015, p. 12). In short, the PRC showed a lack of interest in sincerely cooperating to exert the maximum possible pressure on the DPRK.

North Korea's third nuclear test, 2013

North Korea conducted its third nuclear test in February 2013. In response, Washington went to the United Nations again; the outcome was UNSC Resolution 2094. Washington did show an interest in dialogue, but with a precondition that North Korea should take detailed and meaningful actions toward denuclearization first (Song and Lee 2016, p. 24). At the same time, it strongly demanded China's cooperation once again. Then Secretary of State John Kerry urged that China should take stronger, effective measures to deter North Korea's provocations, stating that "without China, North Korea will collapse (Voice of America 2013)." During the summit with new Chinese President Xi Jinping in June 2013, President Obama emphasized that both countries should continuously press North Korea in order to deliver a clear message for denuclearization.

China also condemned this test, this time with special bitterness. A number of high officials of the Communist Party and the government lashed out against it. Foreign Minister Yang Jiechi summoned the North Korean ambassador to lodge a solemn representation, a first for China-North Korea bilateral relations (Cha 2016). In March, Qiu Yuanping, a vice-director of the Communist Party Central Committee Foreign Affairs Office, disclosed debates among the delegates to the 12th Chinese People's Political Consultative Conference over whether China should "keep or dump" North Korea and "fight or talk" with the north—very unusual discussion given the longtime friendship between the two countries (Kim 2015). In April, President Xi remarked in a speech at the annual Boao Forum for Asia, "No one should be allowed to throw a region and even the whole world into chaos for selfish gain," indirectly but clearly pointing to North Korea, according to the interpretations of many commentators (Xi 2013). Through spring 2013, the Chinese authorities purposely permitted anti-North Korean sentiment to prevail in the internet and the media.

Some renowned Chinese intellectuals also proposed changes in China's policy towards North Korea. Shen Dengli, one of China's most influential realist scholars, stated, "China has reached a point where it needs to cut its losses and to cut North Korea loose. … Because North Korea disrespected and hurt China's national interest (Shen 2013)." Deng Yuwen, deputy editor of the Xuexi Shibao (Study Times), a weekly journal of the Central Party School, wrote in his own column for the Financial Times that "China should abandon North Korea (Deng 2013)."

China also took concrete actions against North Korea. China voted for UNSC Resolution 2094, which condemns the nuclear test and calls upon member states to impose financial sanctions on the country. Previously, goods headed to North Korea had frequently been changed without permission of the customs at Dalian Port. But with the adoption of the resolution, these goods began to be tightly controlled (Song and Lee 2016, p. 26). China also strictly managed the issuing of new visas to North Koreans. Most importantly, the Bank of China, a commercial but state-controlled bank, cut off its transactions with the Foreign Trade Bank of the DPRK, which had been suspected of financing nuclear programs (Bradsher and Cumming-Bruce 2013). Furthermore, China publicly banned its companies and individuals from exporting to North Korea a 236-page list of dual-use materials and technologies that potentially could be utilized to produce missiles and weapons of mass destruction (Sevastopulo and Mundy 2013).

Both rhetoric and actions from Beijing against Pyongyang were

strong enough for Washington and its allies in the region to conclude that Beijing was starting to pivot away from its client. For example, Kurt Campbell, then Assistant Secretary of State for East Asian and Pacific Affairs, noted, "There is a subtle shift in Chinese foreign policy towards North Korea (Moore 2013)." Yun Byung-se, Foreign Minister of South Korea, echoed, "I clearly feel changes of China's attitude towards North Korea." Still, a majority of experts in Chinese foreign policy called for caution; and indeed, the PRC's harsh rhetoric and actions proved short-lived.

Less than one month after Yang Jiechi summoned the North Korean ambassador to Beijing to protest the third nuclear test, he stated that "sanctions are not the fundamental way to resolve the issue," implying that China would not forsake North Korea (China Network Television 2013). In October 2014, Liu Hongcai, the Chinese ambassador to North Korea, used the expression "close relations like the lips and teeth," which had not been used since the third nuclear test (Ahn 2014). In January 2015, around Kim Jong-un's birthday, a spokesperson for the Chinese Foreign Ministry issued a statement that "China hopes to restore the traditional friendly and cooperative relationship with North Korea (Hong and Lee 2015)

In practical terms, despite the enforcement of economic sanctions right after the adoption of UNSC Resolution 2094, China restored and even expanded its economic transactions with North Korea. No crude oil was exported to the north in February, the month when Pyongyang conducted the test, and the first three months of 2013 witnessed a downturn of China's exports to North Korea. However, in 2013 overall, bilateral trade increased by 8.9 percent compared with 2012.

North Korea's fourth nuclear test, 2016

North Korea conducted its fourth nuclear test on 6 January 2016. It declared that it had successfully carried out a hydrogen bomb test with a technology for miniaturizing nuclear weapons. The international community has been skeptical about this claim. While hydrogen bombs' explosive power ranges in the hundreds of kilotons, North Korea's fourth test registered at only about 7 kilotons. However, this does not mean that the test was a failure. On the contrary, nuclear experts have concluded that the fourth test involved a boosted fission technology needed for miniaturization of nuclear weapons and that the test successfully demonstrated steps forward toward a hydrogen bomb.

The international community responded to the mounting threat by ratcheting up sanctions on North Korea. On 2 March 2016 the United Nations Security Council unanimously adopted Resolution 2270, with the strongest sanctions ever. The major components of the resolution include (1) expanding the arms embargo on North Korea; (2) enforcing mandatory inspection of cargo destined for and originating from the DPRK; (3) expanding financial sanctions to the extent of freezing assets of the DPRK government and its Workers' Party entities associated with illicit programs; (4) enforcing an export ban on North Korea's natural resources such as coal, iron, and other minerals; (5) expelling DPRK diplomats involved in illicit activities; (6) expanding the list of individuals targeted for sanctions; and (7) prohibiting DPRK nationals from training in specialized fields that could contribute to proliferation activities (United Nations Security Council Resolution 2270).

UNSC Resolution 2270 was the outcome of the PRC's agreement with the United States for a strong and unified international response to North Korea's provocations. Right after the adoption of the resolution, China vowed strict implementation. However, three problems stand out. First, there is a critical loophole that China has refused to close. Throughout the deliberation and writing of the resolution, China insisted on an exemption stipulating that the "livelihood" of ordinary North Koreans must not suffer. As a result, the ban on transactions involving North Korea's natural resources

can be eased if sales are determined to be exclusively for livelihood purposes and unrelated to generating revenue for the DPRK's nuclear or missile programs. China has space to interpret the exemption flexibly (Hyun 2016, p. 171). Second, China has shown mixed signs about implementing the sanctions. There was a decline in North Korea's export of coal to China for the first half of 2016. The DPRK's coal export to the PRC for the first six months of 2016 dropped 14.6% to 487 million USD, from 570 million USD of the first half of 2015 (Lee 2016, pp. 27-36). The decline of the export was particularly substantial after Beijing's declaration in April to implement the UNSC Resolution 2270. However, according to a New York Times report from Dandung, China, a port city through which passes virtually everything that keeps the North Korean economy afloat, out of "up to 200 trucks a day crossing the Yalu River to North Korea, only 5 percent of the containers are inspected." A requirement that countries inspect all cargo entering or leaving North Korea for banned goods is not enforced. Rampant smuggling is also circumventing the sanction scheme. The report continues, "the banned export of North Korea's minerals has continued with ships privately belonging to Chinese smugglers (Perlez and Huang 2016)." And, statistics suggests that the overall trade between the DPRK and the PRC for the first half of 2016 actually increased by 0.6% from the same period of the previous year. Despite the decline of coal sale, North Korea's export of iron increased by 3.9% (Lee 2016, p. 30). Third, the PRC has displayed continued ambivalence in dealing with the DPRK. On one hand, China announced that "China would strictly follow UNSC Resolution 2270," and Xinhua News Agency stated in its commentary that the U.N. sanctions are a necessary price Pyongyang has to pay for its recent nuclear test and satellite launch (Hyun 2016, p. 171). On the other hand, China has opposed any other measures that might drive an already complex and sensitive situation on the Korean Peninsula into greater tension. For example, China made it clear that it would oppose any independent sanctions by any countries against North Korea, directly targeting the United States and South Korea, which have been executing additional independent sanctions on North Korea.

CONCLUSION

The Obama administration's strategic patience toward North Korea has stood on an unwarranted expectation that the PRC would exercise pressure to curb the DPRK's nuclear adventures, because China and the United States share an interest in denuclearizing the Korean Peninsula. However, China has other, vested economic and strategic interests in the stability of North Korea. Hence it has displayed its dissatisfaction with Pyongyang's nuclear programs by voting repeatedly for sanctions sponsored by the U.N. Security Council, but has—again repeatedly—failed to enforce those sanctions, or has done so only temporarily. Under P-A theory, this is classic shirking. The consequence has been Pyongyang's uninhibited growth of nuclear capabilities while Washington stood on the sidelines.

This study makes two suggestions based on the discussions above. First, if it is still to delegate the task of controlling North Korea to China, the United States should design and adopt tighter oversight mechanisms. Debates on P-A theory show that the principal is far from helpless when faced with the agent's shirking and slippage. The principal may monitor agency behaviors and influence them through the application of sanctions. In a seminal study of Congressional oversight, McCubbins and Schwartz present two types of oversight mechanisms. In what they call "police-patrol oversight," the principal actively monitors some sample of the agent's behavior to detect and remedy, and hence also discourage, any violations of trust (McCubbins and Schwartz, 1984, p. 166).

What McCubbins and Schwartz call "fire-alarm oversight" is less intrusive: the principal relies on third parties such as citizens, interest groups, and nonprofit organizations to monitor agency activity and seek redress through appeal to the agent (McCubbins and Schwartz, 1984, 171-173).

It may be impractical for Washington to adopt "police patrol" type oversight, given the absence of a formal contract with Beijing and China's probable resistance to any intrusion in its domestic affairs. However, "fire-alarm oversight" may be an attractive alternative. Nonpartisan research organizations can monitor activities of governments, both central and local, and business organizations and generate reports of their compliance with UNSC sanctions. Beijing's recent crackdown on Ms. Ma Xiahong and her Hongxiang Industrial Development Co. for their alleged role in aiding North Korea's nuclear program is a good example. A collaborative study by the Asan Institute in South Korea and the Center for Advanced Defense Studies in the United States detected illicit transactions the firm had made to aid Pyongyang's nuclear program and its efforts to evade U.N. and Western sanctions (Wong 2016). The researchers reported their findings to the U.S. government, prosecutors from the U.S. Department of Justice alerted Chinese authorities, and Chinese authorities put Ms. Ma and her business under criminal investigation. This may be no more than a unique episode. However, it set an important precedent: given sufficient information, Washington could move Beijing into stronger punitive measures against Pyongyang. Exercising oversight consumes considerable resources. However, agency losses can be contained only by undertaking measures that are themselves costly (Kiewiet and McCubbins 1991, p. 27).

The second suggestion this paper makes is that Washington deal directly with Pyongyang. Strategic patience resulted from Washington's bitter feeling of betrayal at Pyongyang's lack of genuine commitment to resolving nuclear standoffs. True, North Korea is a notoriously unpredictable and unreliable business partner. However, Pyongyang has already sent back a very expensive invoice, while Washington did little about its nuclear and missile programs. As the recent alleged hydrogen bomb test indicates, North Korea has made steady progress toward the completion of its nuclear weapon project even under incremental sanctions. At the same time, it is building up missile capabilities to hit the U.S. mainland as well as military installations across the globe (Wallerstein 2015). To make matters worse, the absence of direct talk has left Washington with little information and understanding regarding Pyongyang's intention and resolve. The United States lacks any window into the strategic mind-set of Kim Jong-un (Choi, 2016, p. 64). China is indeed a key player in dealing with North Korea. However, Washington needs to understand that Beijing will not move first in Washington's favor. Beijing has its own agenda and interests in North Korea. At the same time, Beijing has taken the position that the nuclear crisis is basically a matter between Pyongyang and Washington. Instead of waiting and expecting the PRC to be squarely aligned with Washington, it should make bold diplomatic overtures towards Pyongyang. Washington may have a few more years until Pyongyang's nuclear and missile programs become full-fledged, but the new administration no longer has the luxury of ignoring threats from North Korea.

REFERENCES

Ahn, Hyung-young. "Pukhanjujae Chungguktaesa 'Pukchungŭn Hy lmaeng' Kwangye bokw n Shinho? [Chinese Ambassador to North Korea Stated 'DPRK and the PRC Have a Partnership of Blood Alliance,' A Sign of Restoration of Strained Relationship?]" Chosun Ilbo, October 17, 2014, http://news.chosun.com/site/data/html_dir/2014/10/27/2014102700644.html

Alchian, Armen A., and Harold Demsetz. "Production, Information Costs, and Economic Organization." American Economic Review 62:5 (December 1972): 777-795.

Bosworth, Stephen., and Robert L. Gallucci. "Reasons to Talk to North Korea." New York Times, October 27, 2013, http://www.nytimes.com/2013/10/28/opinion/reasons-to-talk-to-north-korea.html

Bradsher, Keith., and Nick Cumming-Bruce. "China Cut Ties with Key North Korean Bank." New York Times, May 7, 2013, http://www.nytimes.com/2013/05/08/world/asia/china-cuts-ties-with-north-korean-bank.html

Cha, Victor D. "The North Korea Question." Asian Survey 56:2 (March/April 2016): 243-269.

Choi, Jong Kun. "The Perils of Strategic Patience with North Korea." Washington Quarterly 38:4 (Winter 2016): 57-72.

China Network Television. "Waijiaobu Buzhang Yang Jiechi Lianghui [The press conference with Foreign Minister Yang Jiechi for the Lianghui]." March 9, 2013.

Chung, Jae Ho., and Myung-hae Choi. "Uncertain Allies or Uncomfortable Neighbors?: Making Sense of China-North Korea Relations, 1949-2010." Pacific Review 26:3 (2013): 243-264.

Cordesman, Anthony H., and Aaron Linn. The Chancing Military Balance in the Koreas and Northeast Asia. Washington, D.C: Center for Strategic and International Studies, 2015.

Deng, Yuwen. "China Should Abandon North Korea." Financial Times, February 27, 2013.

Drezner, Daniel W. "Bad Debts: Assessing China's Financial Influence in Great Power Politics." International Security 34:2 (Fall 2009): 7-45.

Fama, Eugene F. "Agency Problems and the Theory of the Firm." Journal of Political Economy 88:2 (April 1980): 288-307.

Foreign Affairs, "Beijing's brand ambassador: Conversation with Cui Tiankai," Foreign Affairs, 92:4 (July/August 2013), https://www.foreignaffairs.com/interviews/2013-05-15/beijings-brand-ambassador

Glaser, Bonnie S. "China's Policy in the Wake of the Second DPRK Nuclear Test." China Security 5:2 (2009): 1-11.

Bonnie S. Glaser., and Brittany Billingsley. Reordering Chinese Priorities on the Korean Peninsula. A Report of the CSIS, Washington, D.C.: Center for Strategic and International Studies, 2012.

Haggard, Stephan., and Marcus Noland. "North Korea's Foreign Economic Relations." International Relations of the Asia-Pacific 8:2 (2008): 219-246.

Hong, Je-sung., and Jun-sam Lee. "Chungguk, Pukchunggwangye '16cha Pangch'im' Pokw n Hwakin [China Confirmed the Restoration of 16 Words Principle in Pyongyang-Beijing Relations]." Yonhap News, January 9, 2015, http://www.yonhapnews.co.kr/international/2015/01/09/0601020000AKR20150109053151083.HTML

Horowitz, Shale. "Why China's Leaders Benefit from a Nuclear, Threatening North Korea: Preempting and Diverting Opposition at Home and Abroad." Pacific Focus 30:1 (April 2015): 10-32.

Hyun, In-Taek. "An Enduring Dilemma on the Korean Peninsula: The North Korean Nuclear Conundrum and South Korea's Strategic Choices." Korean Journal of Defense Analysis 28:2 (June 2016): 163-180.

Kiewiet, D. Roderick., and Mathew D. McCubbins. The Logic of Delegation: Congressional Parties and the Appropriate Process. Chicago, IL: Chicago University Press, 1991.

Kim, Jae-Chun. “ChesaCh’a Pukhan Haeksilh m-gwa Ch n-lyakch k Innae-ŭi Chong n: Miguk-ŭi Taebukch ngch’aek Py nhwa Puns k [‘The Fourth Nuclear Test of North Korea and The End of Strategic Patience: Tracing the US Policy Change toward North Korea].” Tongilch ngch’aeky ngu [Research of Unification Policies] 25:1 (May 2016): 1-23.

Kim, Jih-Un. “Inflated Hope, Unchanged Reality.” Asian Perspective 39:1 (January/February 2015): 27-46.

Kim, Yongho. North Korean Foreign Policy: Security Dilemma and Succession. Lanham, MD: Lexington Books, 2011.

Kissinger, Henry A. “Denuclearizing North Korea: Diplomacy Has to Keep up the Pressure on Pyongyang and Avoid the Side Issues.” Washington Post, November 12, 2006.

Lee, Jong-Kyu. “2016 Ny n Sangbangi Pukhan-ŭi Taeoemuy k Tonghyang-gwa Taebukchejae [The Trend of North Korean Foreign Trade through the First Half of 2016 and Sanctions on North Korea].” KDI Pukhangy ngjereview [North Korean Economics Review] (July 2016): 27-36.

McCubbins, Mathew D., and Thomas Schwartz. “Congressional Oversight Overlooked: Police Patrols versus Fire Alarms.” American Journal of Political Science 28:1 (February 1984): 165-179.

Moe, Terry M., “The New Economics of Organization.” American Journal of Political Science 28:4 (November 1984): 739-777.

Moore, Malcome. “China ‘Shifts Position’ on North Korea.” The Telegraph, April 5, 2013, http://www.telegraph.co.uk/news/worldnews/asia/northkorea/9973353/China-shifts-position-on-North-Korea.html

Nielson, Daniel L., and Michael J. Tierney. “Delegation to International Organizations: Agency Theory and World Bank Environmental Reform.” International Organization 57:2 (Spring 2003): 241-276.

Niksch, Larry A. “China’s Policies toward North Korea’s Nuclear and Missile Programs.” International Journal of Korean Unification Studies 24:2 (August 2015): 1-40.

Noland, Marcus. Famine in North Korea: Markets, Aid and Reform. New York: Columbia University Press, 2007.

Ohn, Daewon., and Mason Richey. “China’s Evolving Policy toward the Democratic People’s Republic of Korea under Xi Jinping.” Asian Studies Review 39:3 (2015): 483-502.

Page, Jeremy. “U.S.-China Nuclear Silence Leaves a Void.” Wall Street Journal, April 13, 2013.

Pape, Robert A. “Soft Balancing against the United States.” International Security 30:1 (Summer 2005), 7-45.

Paul, T. V. “Soft Balancing in an Age of U.S. Primacy.” International Security 30:1 (Summer 2005): 46-71.

Perlez, Jane., and Yufan Huang. “A Hole in North Korean Sanctions Big Enough for Coal, Oil and Used Pianos.” New York Times, April 1, 2016, A4.

Pollack, Mark A. “Delegation, Agency, and Agenda Setting in the European Community.” International Organization 51:1 (Winter 1997): 99-134.

Reilly, James. “China’s Economic Engagement in North Korea.” China Quarterly 220 (December 2014): 915-935.

Sevastopulo, Demetri., and Simon Mundy. “China Issues List of Banned ‘Dual-Use’ Exports to North Korea.” Financial Times, September 24, 2013.

Shen, Dengli. “Lips and Teeth: It’s Time for China to Get Tough with North Korea.” Foreign Policy, February 13, 2013, http://foreignpolicy.com/2013/02/13/lips-and-teeth/

Solomon, Jay. “U.S., South Korea Offer North Talks and Warning.” Wall Street Journal, April 12, 2013a.

Solomon, Jay. “U.S. Offers Direct Korea Talks: Kerry Proposes Dialogue with Pyongyang in Exchange for Nuclear Retreat.” Wall Street Journal, April 14, 2013b.

Song, Jooyoung. “Understanding China’s Response to North Korea’s Provocations.” Asian Survey 51:6 (November/December 2011):

1134-1155.

Song, Wenzhi., and Sangkeun Lee. “China’s Engagement Patterns towards North Korea.” Pacific Focus 31:1 (April 2016): 5-30.

United Nations Security Council Resolution 2270, March 2, 2016, http://www.un.org/en/ga/search/view_doc.asp?symbol=S/RES/2270 (2016)

Voice of America News. “Kerry: China Key to Resolving North Korea Standoff.” http://www.voanews.com/a/kerry-china-key-to-resolving-north-korea-standoff/1643608.html

Wallerstein, Michael B. “The Price of Inattention: A Survivable North Korean Nuclear Threat?” Washington Quarterly 38:3 (Fall 2015): 21-35.

Walt, Stephen M. “Alliances in a Unipolar World.” In International Relations Theory and the Consequences of Unipolarity, edited by G. John Ikenberry, Michael Mastanduno, and William C. Wohlforth, 99-139. New York: Cambridge University Press, 2011.

Wohlforth, William C. “The Stability of a Unipolar World,” International Security 24:1 (Summer 1999): 5-41.

Won, Dong-wook. “Chungguk-ŭi Taebuk Y nghyangny k Puns k Mit’ Ch nmang: Chesamch’a Pukhaeksilh m Ch nhu Sigirŭl Chungsimŭro [Analysis and Prospect of Chinese Influence on North Korea: Focusing on the Period of the Third Nuclear Test].” Kukkaj nlyak [National Strategies] 19:4 (Winter 2013): 57–81.

Wong, Chun Han. “Criminal link in Pyongyang probe.” Wall Street Journal September 24-25, 2016, A7.

Xi, Jinping. “Xi Jinping’s Speech at the Opening Ceremony of the Boao Forum for Asia.” April 7, 2013, http://english.boaoforum.org/mtzxxwzxen/7379.jhtml

Xinhua News Agency. “China Resolutely Opposes DPRK’s Nuclear Test.” October 9, 2006, http://news.xinhuanet.com/english/2006-10/09/content_5180203.htm

WHY NORTH KOREA WON’T GIVE THE WORST WMD TO TERRORISTS[1]

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Abstract

While the Democratic People's Republic of Korea (DPRK) has disavowed support of terrorism, it has also engaged in a wide variety of illicit and illegal activities in order to provide support for the country's underdeveloped economy, including working with illicit non-state actors and supporting terrorist groups—earning a spot on the US state sponsors of terrorism list from 1988-2008. Al Qaeda and other terrorist organizations are known to be seeking CBRN weapons for use in attacks against the West, while other non-state groups may be interested in selling such a weapon to the highest bidder. There are therefore likely willing buyers of North Korea's CBRN weapons. At the same time, there are strong reasons why North Korea would not sell or provide such weapons to outside groups. This paper analyzes the issues involved with North Korea potentially proliferating CBRN weapons to terrorists and other non-state actors, taking into account the DPRK's stockpiles of CBRN weapons, previous illicit activities and support for terrorism, and the different considerations for Pyongyang in making this decision.

Key words: North Korea, WMD, terrorism, proliferation

INTRODUCTION

The United States has long worried that rogue nations could provide weapons of mass destruction[2] to non-state actors like terrorists, and this fear has contributed significantly to US counter-proliferation policies and efforts.[3] While the Democratic People's Republic of Korea (DPRK) has disavowed any support of terrorism and has declared that it actively supports anti-terrorism efforts, the country has on at least one occasion threatened to proliferate chemical, biological, radiological, and/or nuclear (CBRN) weapons[4] (Harrison 2004; York 2015; Kelly 2004; Allison 2004). North Korea has engaged in a wide variety of illicit and illegal activities to support its stagnant and underdeveloped economy, including aiding terrorist groups—earning North Korea a spot on the US's state sponsors of terrorism list from 1988-2008. A variety of US government officials, public figures, and academics have warned that Pyongyang, "the most promiscuous weapon proliferator on earth," might sell CBRN weapons and related delivery vehicles to non-state actors and terrorist groups such as al Qaeda[5] (Allison 2004, 67). Some argue that, if North Korea ultimately does not agree to cease development of and give up its nuclear weapons, "the United States should threaten to use all means, including military force, to stop it" (Allison 2004, 73).

State sponsorship of non-state groups like terrorists can be analyzed as a continuum ranging from active to passive types of sponsorship (Byman 2008). The scenario under investigation in this paper—a regime passing CBRN weapons to terrorists—is a situation in which the central government deliberately decides to arm a non-state group over which it has at least some ability to control and coordinate. Al Qaeda and other terrorist organizations are known to be seeking CBRN weapons and, given the opportunity, would likely be willing buyers for Pyongyang's wares.

Terrorism offers a potential lever of influence to states with weak economies; few allies; limited prestige; and "weak, obsolete,

[2] While "WMD" is common in public discourse, the author prefers "CBRN weapon(s)."

[3] See U.S. documents such as Chanlett-Avery and Squassoni (2006) and the 2002 National Security Strategy of the United States. In 2004 (65), Graham Allison wrote, "almost every month, someone somewhere is apprehended trying to smuggle or steal nuclear material or weapons."

[4] North Korea's President of the Supreme People's Assembly reportedly stated, "We're entitled to sell missiles to earn foreign exchange. But in regard to nuclear material our policy past, present and future is that we would never allow such transfers to al-Qaeda or anyone else. Never." North Korea's former Foreign Minister also said, "Let me make clear that we denounce al-Qaeda, we oppose all forms of terrorism and we will never transfer our nuclear material to others" (Harrison 2004). One former State Department official testified North Korean officials told him in 2003 that they "have nuclear weapons, will not dismantle them, and might transfer or demonstrate them" (Kelly, 2004).

[5] See also statements and articles by Ashton Carter, James Kelly, William Perry, Dick Cheney, Donald Rumsfeld, Graham Allison, and Charles Krauthammer.

and outclassed" conventional military forces (Byman 2005, 22). Furthermore, the provision of arms is one of the most common types of support states have given to terrorists. Pyongyang's willingness to provide such support to a terrorist group would primarily arise from strategic motivations, including the desire to weaken perceived adversaries, obtain diplomatic leverage, power projection, and deterrence. Deniability is another key reason for states to work through terrorist groups. Moreover, any US act perceived by North Korea as aggressive—such as re-designation as a state sponsor of terrorism—could strain North Korea's fragile economy and political system further, perhaps making the leadership desperate enough to sell CBRN weapons to terrorists. At the same time, there are strong reasons why North Korea would not do so. DPRK sponsorship of terrorism runs the risks of more punitive economic sanctions, military strikes, political isolation, and possible blowback; by providing CBRN weapons to non-state actors, North Korea would expect to face even harsher consequences (Byman 2008; 2002).

This paper will analyze the key issues involved with North Korea proliferating CBRN weapons[6] to terrorists and non-state actors more generally. The paper will first review Pyongyang's CBRN stockpiles and investigate its history of weapons sales, illicit activities, and known support for terrorists and other non-state actors. The paper will then look at the considerations the North Korean regime may take into account in deciding to provide CBRN weapons to non-state actors and develop a preliminary assessment of the relative likelihood. Pyongyang's decision to proliferate CBRN weapons to non-state groups would rest on an assessment of many factors, including international norms, the state of the economy, the value of the weapons to North Korea and sufficiency of stockpile, the strength of relationship with the group, the ability to control use of the weapon and the impact of such transfers on the security and strategy of their adversaries, and the likelihood of attribution in the event of use. The paper argues that, despite a long history of illicit activities involving both state and non-state actors as well as a strong economic rationale, the DPRK is highly unlikely to decide that the benefits outweigh the risks, and is especially unlikely to pass on the worst weapons.

[6] The focus of this paper is on CBRN weapons and materials, not on the transfer of tacit knowledge or enabling support.

DPRK STOCKPILES

North Korea openly declares that it has nuclear weapons and advanced missiles but denies possessing biological or chemical weapons (see Table 1). North Korea is not a party to the Chemical Weapons Convention (CWC), has acceded to the Biological and Toxin Weapons Convention (BWC) and Geneva Protocol, and withdrew from the Treaty on the Non-Proliferation of Nuclear Weapons.

With initial assistance from the Soviet Union and China in the 1950s, North Korea has worked to develop its chemical industry—and was likely producing offensive chemical weapons by the early 1980s (Tucker 2006, 377; Cha 2012, 233). Defectors have reported that the DPRK may be capable of producing up to 20 different chemical agents (Bermudez Jr. 2013). North Korean defectors, the US Department of Defense (DOD), and the Republic of Korea (ROK) Ministry of Defense have reported that the DPRK commenced a biological weapons program in the early 1960s. Most analyses describe the DPRK's bioweapons program as comparatively basic, indicating a latent capability to develop bioweapons. North Korea reportedly continues to research agents that could support an offensive bioweapons program and has the capability to develop, produce, and weaponize bioagents (US DOD 2013; ROK MND 2012, 36; US Department of State 2014, 21; Cha 2012, 233).

Pyongyang began developing nuclear weapons in the mid-1950s, relying heavily on the Soviet Union for technical expertise and assistance. Although North Korea's nuclear program has traditionally been plutonium-based, Pyongyang appears to have developed uranium enrichment capacity (Hecker 2010). While the DPRK's 2006 and 2009 nuclear tests were of plutonium weapons, the 2013 and two 2016 tests may have been uranium bombs (Nikitin 2013). The DPRK's fissile material could also be utilized in combination with a conventional explosive as a radiological dispersal device,[7] and the country has a variety of sources of radiological material that could be employed in such an attack. For instance, sources could be procured from radioactive waste or commercially available devices—such as in hospital equipment—and can be integrated into a weapon that emits ionizing radiation or disperses radioactive material (Ferguson and Smith 2013, 186).

Figure 1. Estimated DPRK CBRN Stockpiles

Weapon Type	Agents	Amounts
Chemical	Blister: mustard (H/HD) Blood: hydrogen cyanide (AC) Choking: chlorine (Cl), phosgene (CG and CX) Nerve: sarin (GB), soman (GD), tabun (GA), V-agents (VM and VX) Riot control: adamsite (DM), chloroacetophenone (CN), chlorobenzylidene malononitrile (CS)	2,500-5,000 tons stockpiled Estimated surge capacity of 12,000-20,000 tons per year
Biological	Bacillus anthracis (anthrax) Brucella spp. (Brucellosis) Clostridium botulinum (botulism) Dysentery[8] Francisella tularensis (tularemia) Hantavirus (Korean hemorrhagic fever) Mycobacterium tuberculosis (tuberculosis) Rickettsia rickettsia (Rocky Mountain Spotted Fever) Salmonella typhi (typhoid Fever) T-2 Mycotoxins[9] Variola major (smallpox) Vibrio cholerae (cholera) Yellow fever virus Yersinia pestis (plague) May be researching weaponization of Avian Influenza and Severe Acute Respiratory Syndrome (SARS)	Limited quantities
Nuclear	Plutonium Uranium	6-8 plutonium[10] 4-8 uranium Estimated capability to produce one plutonium and up to five uranium weapons each year

Sources: US DOD (2000); GlobalSecurity.org (2011); Peters (2015); Bermudez Jr. (2013); ROK MND (2012, 36); Nuclear Threat Initiative (2014a; 2014b; 2015); DOD (2013); Farah (2006); Nikitin (2013); Albright (2015); Chanlett-Avery and Squassoni (2006); Wertz and McGrath (2016).

[7] Additional types of radiological weapon include radiological incendiary devices and radiation emission devices.

[8] Additional types of radiological weapon include radiological incendiary devices and radiation emission devices.

[9] T-2 Mycotoxins are part of the tricothecene toxin family and produced by several types of mold; sources did not indicate which molds may be utilized by the DPRK.

[10] Terrorists would likely prefer uranium to plutonium. While twice as much fissile material would be needed, a uranium-based weapon is easier to build and therefore more appealing. Either could be used in a radiological weapon.

DPRK'S ILLICIT ACTIVITIES, WEAPONS SALES, AND SUPPORT FOR TERRORISM

North Korea is a desperately poor country with a population of 25 million and an estimated GDP of $40 billion. During the Cold War, the country was subsidized by the Soviet Union and has been substantially supported by China over the past several decades. The DPRK has engaged in a multitude of illicit activities to provide funds for the regime, marketing and transporting missile technology, arms, and counterfeit products to criminal networks and rogue states around the world (Chestnut 2007; 2014). North Korea's weapons sales "are a critical source of foreign currency" for the regime and unlikely to cease despite increasing UN sanctions and expanding international interdictions. The DPRK uses a variety of methods to ship weapons, including mislabeling crates, using multiple front companies and intermediaries, air cargo routes, and falsifying end-user certificates (US DOD 2013, 20). North Korea could put these methodologies and networks towards smuggling CBRN weapons out of the country, destined for terrorists and other non-state groups.

ILLICIT ACTIVITIES

North Korea has engaged in a variety of illicit[11] activities to earn cash for the regime since the 1970s, including drug production and trafficking; counterfeiting of currencies and items such as pharmaceuticals and cigarettes; smuggling endangered species products, gold, cigarettes, drugs, gems, used cars, used phones, and alcohol; and insurance fraud (Eberstadt 2003; Horowitz 2003; Becker 2007; Perl 2007; Chestnut 2007; Chestnut 2014; Wyler and Nanto 2008; Nanto 2009; Kan, Bechtol Jr., and Collins 2010; Coe 2005). While these activities were initially justified on an ideological basis, the DPRK has been increasingly desperate to earn hard currency. The regime has historically relied heavily on weapons sales and smuggling. Illicit activities may generate total annual revenue ranging from hundreds of millions to several billion dollars (Gale 2014). Depending on aid levels from China and Russia, Pyongyang needs to generate approximately $1 billion annually to finance its trade deficit. However, Pyongyang's income from illicit sources may be decreasing,[12] as activities are increasingly privatized and decentralized. Pyongyang has developed an elaborate and sophisticated system of smuggling operations—involving North Korean diplomats and diplomatic pouches, embassies, intelligence services, state-sponsored firms, and Chinese companies that can evade sanctions—in order to move illicit counterfeit goods and money around the world (Zarate 2013, 221, 372).[13] In dozens of documented incidents over the past several decades, North Korean military officers and diplomats around the world have been arrested for smuggling (Solomon and Dean 2003).

Starting in the late 1980s, Pyongyang cultivated partnerships with Asian gangs and other non-state organized crime groups to traffic drugs and counterfeit cigarettes, providing the country with alternate established smuggling routes (Solomon and Dean 2003;

[11] Pyongyang also engages in licit activities to raise funds, including operating hotels and restaurants overseas.

[12] It is also possible that North Korea has simply adapted and adjusted its operations, better concealing its activities (Chestnut 2014, 107).

[13] Defectors have reported that Kim Jong Il tasked officials to study international sanctions, anticipate future sanctions, and determine how to bypass both (Chestnut 2014, 106).

Chestnut 2014, 88).[14] Reportedly, North Korea uses military and commercial ships to smuggle drugs and has utilized its special operations personnel to undertake sophisticated drops at sea (Kan, Bechtol Jr., and Collins 2010, 11-16). Recently, state-owned labs and factories have decreased production while lower-level producers have grown (Becker 2015). In addition, Pyongyang has outsourced at least some drug production to transnational drug cartels, allowing them to operate unchecked within its borders in return for a percentage of their profits—though this reduces the ability of Pyongyang to control these activities (Hamilton 2015; Chestnut 2014).

As such, established smuggling networks[15] and partnerships with organized crime could be repurposed to transfer CBRN weapons and materials to terrorists. While several of North Korea's illicit shipments have been interdicted over the past decade, this likely pales in comparison to the number of shipments that have not been discovered. In comparison to the interdicted drug and missile shipments, smuggling a small CBRN weapon would be much more difficult for other countries to detect and interdict (Coe 2005, 80). Weaponized biological agents could be concealed in a briefcase, while fissile material for a nuclear or radiological weapon could weigh as little as 10 kilograms. Several barrels of a chemical agent would weigh 500 kilograms. A full nuclear warhead would weigh more, but could potentially be disassembled for easier concealment during shipment.

[14] According to one State Department official, "North Korean traffickers have links to Russian, Japanese, Taiwanese, China, Hong Kong, and Thai organized crime elements" (Bach 2002).

[15] Pyongyang also has a fleet of miniature submarines that could be utilized for transfer of illicit goods such as CBRN weapons.

WEAPONS AND TECHNOLOGY PROLIFERATION

The DPRK has extensive experience and networks developed via illicit activities in its sales of military, nuclear, and missile technology and expertise; the country "appears to be applying tools developed in criminal activities—for example, the use of middlemen, multiple names, front companies, and complicated financial arrangements—to proliferation" (Chestnut 2014, 98). North Korea has long licitly and illicitly exported[16] small arms, multiple rocket launchers, anti-aircraft guns, missiles, and/or related technology to countries such as Iran and Syria (Oliemans and Mitzer 2015; Becker 2005, 158-9; Manyin et al 2015, 12; Bechtol Jr 2009, 106; Allison 2004, 67).[17] The DPRK has also acted as an intermediary, procuring conventional military supplies, missile technology, and nuclear items from suppliers—such as Japan and Europe—for other countries (Albright, Brannan, and Stricker 2013, 619).

Iran and North Korea have cooperated in ballistic missile technology development since the 1980s. There have been reports that Pyongyang has exported nuclear weapons technology, training, and knowledge to Iran and sent teams of experts to visit Iranian facilities (Kerr, Nikitin, and Hildreth 2014, 9; Irish 2015). Secretary of Defense Ashton Carter stated that Iran and North Korea could be working together on nuclear weapons as "North Korea is a welcome all comers kind of proliferator" (Carter 2015). Other recent reports indicate that North Korea may have been helping Myanmar with nuclear technology in the early 2000s (Bechtol Jr. 2009, 110).

In addition to North Korea's ballistic missile and related technol-

[16] It is also possible that North Korea has simply adapted and adjusted its operations, better concealing its activities (Chestnut 2014, 107).

[17] Defectors have reported that Kim Jong Il tasked officials to study international sanctions, anticipate future sanctions, and determine how to bypass both (Chestnut 2014, 106).

ogy sales to Syria, the two countries have also engaged in nuclear technology cooperation since the late 1990s, possibly including steps towards nuclear weapons development (Kerr, Nikitin, and Hildreth 2014, 1; Kerr, Hildreth, and Nikitin 2015, 5; Bechtol Jr. 2009, 100). The DPRK was assisting Syria in its development of a nuclear program, including building a plutonium reactor that was destroyed in a 2007 Israeli strike, and the DPRK may remain involved in a possible Syrian nuclear weapons program (Mohammed and Zakari 2008; Grisafi 2015). Pyongyang may also have assisted Syria with a biological program (Bechtol Jr. 2009, 101).

Over the past several decades there have been reports that the DPRK has provided chemical weapons, technology, or agents to countries including Iran, Egypt, Libya, and Syria. Bilateral chemical weapons activity with Syria started in the early 1990s, with North Korea initially selling Syria chemical weapons and then building several weapons facilities (Bechtol Jr. 2013). The relationship appears to have expanded significantly in the mid-2000s; and in 2012, a Syrian military defector stated that North Korean experts in chemical weapon treatment and usage were assisting the Syrian Army (Bermudez Jr. 2013).

SUPPORT FOR TERRORISM

North Korea was designated by the United States as a state sponsor of terrorism from 1988-2008. Subsequent removal from the list has led to calls for re-designation, including several legislative attempts by Congress (McLaughlin 2013; Stanton 2015; Manyin et al 2015, 1; Bechtol Jr. 2013). After DPRK provocations and a second nuclear test in 2009, the Obama Administration announced it would consider relisting the country (Niksch 2010, 1). DPRK agents have directly engaged in terrorist acts, such as bombing the South Korean President's visit to Myanmar in 1983 and a Korean Air Lines civilian flight in 1987, killing all on board. Pyongyang has also abducted thousands of individuals, including citizens from Japan, South Korea, Lebanon, and France (Becker 2005, 146-7). There have been reports that North Korea has kidnapped and assassinated defectors overseas; several assassination attempts utilized syringes filled with a toxin.[18]

For decades, the DPRK has maintained links with a variety of terrorist groups. As early as the 1960s, North Korea ran training camps for Palestinian militants (Berger 2014). During the 1970s, Pyongyang provided training and weapons to terrorist and guerilla groups in at least ten Latin American countries (Cha 2012, 232). The DPRK ran at least 30 terrorist and guerilla training camps from 1968-1988; reports indicate that more than 5,000 recruits from more than 20 countries attended these camps for courses lasting between three and eighteen months. North Korea also ran training camps in the Middle East and Africa, training terrorists from the Irish Republican Army to the Italian Red Brigades. North Korea has provided training and/or a variety of arms—including artillery, rocket-propelled grenades, and naval patrol boats—to the other terrorist groups, including the People's Front for the Liberation of Palestine (Bechtol Jr. 2010, 48; Bechtol Jr. 2013; Chanlett-Avery and Squassoni 2006,11). Aum Shinrikyo representatives reportedly visited North Korea on several occasions, potentially to discuss purchasing CBRN weapons (Parachini 2010, 96; Kaplan and Marshall 1996, 68).

According to one expert, "Since 2008, North Korea has increased its use of terrorism as an instrument of state policy, and also appears to have increased its material support for designated terrorist organizations" (Sky News 2015). The State Department noted

[18] For instance, see Koo (2014); Radio Free Asia (2014); Cha (2012, 232); US Department of State (1999, 55); Stanton (2015, 21, 59-64).

in 1999 that Pyongyang maintained links to al Qaeda, while other reports allege that North Korea supplies al Shabab (US Department of State 1999, 55; Bechtol 2013). North Korea has sold weapons to Iran that were likely destined for Hezbollah and Hamas; several such shipments have been intercepted (Niksch 2010, 17-18). In 2014, reports emerged that North Korea and Hamas were negotiating a new arms deal—worth hundreds of thousands of dollars—for missiles and communication equipment. It is also likely that North Koreans have advised Hamas on building an extensive network of tunnels in Gaza (Coughlin 2014). A variety of reports have detailed an extensive North Korean program to train and arm Hezbollah. The North is also reported to have sent experts to assist with psychological training of Hezbollah suicide bombers (Niksch 2010, 18-20). In 2014, US courts ruled on several occasions that North Korea is liable for missile and rocket attack damages due to its provision of material support, training, and assistance to Hezbollah (Chang 2014; Kerr et al 2014; Stanton 2015; Chaim Kaplan 2014a, 2014b).

DPRK: LIKELIHOOD TO PROLIFERATE TO TERRORISTS

Despite denuclearization and normalization negotiations with the United States in the 2000s, North Korea "has showed no signs of ceasing or slowing its proliferation of WMD, conventional weapons, and military training programs to anyone who is willing to purchase them—including rogue states and terrorist groups" (Bechtol Jr. 2009, 99). One analyst argues that Pyongyang's sponsorship of terrorism has "increased in terms of its seriousness, frequency, and global reach" since the United States first announced in 2006 it would remove the DPRK from the state sponsors of terrorism list (Stanton 2015, 95).

However, should North Korea decide to provide CBRN weapons to non-state actors, it would likely be able to do so—and without detection by the international community. As described, Pyongyang has developed extensive smuggling capabilities through its illicit activities, often involving ties to terrorist and criminal organizations in Asia, the Middle East, and Europe. DOD has noted that although some of Pyongyang's weapons shipments have been interdicted, it will "continue to attempt arms shipments via new and increasingly complex routes" (US DOD 2013, 22). The DPRK has not only learned how to evade sanctions on their banks and front companies, the country is also "very, very good at getting around initiatives taken to stop their actual proliferation shipments to various countries and non-state actors around the world" (Bechtol Jr. 2013).

Assuming no change in exogenous factors[19] and a generally stable political situation,[20] as a generally rational actor,[21] Pyongyang's decision-making calculus regarding proliferating CBRN weapon to non-state groups would take a variety of factors into account, including international norms, the state of the economy, the value of the weapons to North Korea and sufficiency of stockpile, the strength of relationship with the non-state group, the ability to control use of the weapon and the impact of such transfers on the security and strategy of their adversaries, and the likelihood of attribution. Ultimately, the perceived benefits would need to outweigh the calculation of risks.

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[19] Such as an attack by an outside power

[20] Defined as no major deviation from the current political situation in North Korea

[21] While many may not agree that North Korea can be considered a rational actor, I believe the regime's key concerns are security and regime perpetuation—both of which would be at stake in a choice to provide CBRN weapons to non-state groups. So in the issue area of security, at least, I judge North Korea to generally be a rational actor. See, for instance, Roy (1994). Additionally, while Pyongyang can be seen as an idiosyncratic international actor that may not have the same value system or decision-making processes as Western democracies, I believe that such a significant decision as providing CBRN weapons or materials to non-state actors would be carefully considered based, again, on the regime's key priorities of security and regime survival.

INTERNATIONAL NORMS AS A RESTRAINT

International norms have been cited as a key inhibitor of intentional state proliferation of CBRN weapons to terrorists and other non-state groups. Indeed, North Korean officials have stated that the DPRK would "never allow" transfers of nuclear material to al Qaeda or other terrorist groups (Harrison 2004).[22] The DPRK has also claimed on many occasions that the United States used biological weapons during the Korean War, indicating that the North at least acknowledges the existence of non-use norms. It is likely that widely accepted non-use norms would provide at least some sort of constraint on North Korea's potential decision to transfer CBRN weapons to non-state actors. The DPRK's primary economic and political supporters – in particular China – have a strong stake in the current international system and the norms underpinning this structure. Following a transfer to non-state actors, in addition to the ever more acute isolation Pyongyang could expect, the DPRK may fear that its few remaining supporters would see this as the last straw, abandoning the North Korean regime.

However, the strength of the norms surrounding the use of CBRN weapons varies. The nuclear non-use and non-proliferation norm may be the strongest, especially outside of a life-or-death wartime situation. Both biological and chemical weapons were outlawed in the 1925 Geneva Protocol. The BWC has been in effect for 40 years, and biological weapons have rarely been used even in war. As such, the bioweapon non-use norm has relatively strong force, despite attempted and limited use by terrorists. The norm against use of radiological material may be the third strongest. Although the effects of an attack would likely be comparatively limited, and therefore those employing such a weapon may not view it in the same category as nuclear or biological agents, there is a limited precedence of use. However, the chemical weapons norm is weakest. The CWC was signed in 1992, and while the treaty is more robust in verification and enforcement than the BWC, chemical weapons have a vastly greater history of use. Widely utilized in World War I, many states continue to utilize forms of chemical weapons for domestic crowd control. In addition, chemical weapons have been used by regimes like Syria on many occasions against their citizens as well as external enemies; terrorist groups in the Middle East have also used chlorine and mustard gas in attacks.

Overall, international norms do not have a strong track record in restraining Pyongyang's behavior and provocations. North Korea has on many occasions condemned all forms of terrorism and stated its resolute opposition to the encouragement and support of terrorism—while at the same time maintaining ties with terrorist groups and other criminal non-state actors. And, the DPRK has stated that it could "transfer nuclear weapons to terrorists" if it so desired (Kyodo News 2005).[23] One State Department official reported that in 2003, North Korean officials stated "they have nuclear weapons, will not dismantle them, and might transfer or demonstrate them" (Kelly 2014). Furthermore, scholars like Graham Allison have argued that North Korea likely thinks it could "get away with" selling a nuclear weapon to terrorists (Allison 2010).

[22] For instance, Selig Harrison reported in 2004 that Kim Yong Nam, then-President of the Supreme People's Assembly, told him, "We're entitled to sell missiles to earn foreign exchange. But in regard to nuclear material our policy past, present, and future is that we would never allow such transfers to al-Qaeda or anyone else." Former DPRK Foreign Minister Paik Nam Soon similarly said, "Let me make clear that we denounce al-Qaeda, we oppose all forms of terrorism and we will never transfer our nuclear material to others. Our nuclear program is solely for our self-defence. We denounce al-Qaeda for the barbaric attack of 9/11, which was a terrible tragedy…"

[23] It should be noted that, to the author's knowledge, this explicit of a claim has not been repeated and may have been a negotiating tactic.

ECONOMIC FACTORS

The North Korean economy has been struggling for decades. In the 1990s, up to 2.5 million North Koreans starved to death; in 2013 84% of North Korean households still had "borderline" or "poor" levels of food consumption (Stanton and Lee 2014). The DPRK's military and weapons programs require billions of dollars annually, and the regime also needs to buy the support of the Pyongyang elite. Over the past 20 years, increased international scrutiny of North Korean activities and money flows brought on by the DPRK's nuclear program have made it more difficult for the regime to finance itself from illicit activities. In addition, the country has few licit avenues through which to make money; key among these are commodity sales, Chinese and Russian investment, and sending laborers to work overseas.

Difficult economic conditions could increase the likelihood that a desperate North Korea would decide to provide well-funded non-state actors with CBRN weapons in return for much-needed cash. In 2009, the Director of National Intelligence said that North Korea would be more likely to sell its nuclear weapons or fissile material to other actors if it faced "an extreme economic crisis where the potentially huge revenue from such a sale could help the country survive" (Blair 2009, 25). One analyst notes that while it is unlikely the DPRK would sell nuclear weapons or material to a terrorist organization, "faced with enough economic pressure, Pyongyang will eventually sell anything to anyone" (Coe 2005, 83).

However, conditions have improved since the famine in the 1990s, and the decision-making elite in Pyongyang may be loath to give up their status quo in return for the extra funds brought by a sale of a CBRN weapon. Furthermore, the expected increase in isolation and international support for expanded sanctions would have a significantly negative effect on the regime and Pyongyang elite—likely ultimately costing the regime far more than they would gain financially from the weapons sale.

HIGH VALUE OF CBRN WEAPONS TO THE REGIME

CBRN weapons are very expensive to develop and maintain, so a state transferring such a weapon from a small, costly arsenal would need to be very motivated. Beyond the monetary value, Pyongyang likely regards CBRN weapons, especially nuclear weapons, as integral for regime defense, deterrence of the United States, contributing to its international prestige, and enhancing its ability to engage in coercive diplomacy (Cha 2002; Clapper 2014, 6; ROK MND 2012, 27). North Korea has also learned from the treatment of other countries, such as Libya, voluntarily ending CBRN development, and subsequently losing power. Furthermore, Pyongyang sees India, Iran, Israel, and Pakistan as examples of countries whose nuclear programs provided political and military leverage that they otherwise may not have had (KCNA 2013).

Many analysts believe Pyongyang maintains an arsenal of 2,500-5,000 tons of chemical weapons agents, the third largest in the world.[24] The regime likely sees its chemical agent stockpile and production capabilities as comparatively robust—and may not be opposed to providing non-state actors with "small" amounts.

North Korea is believed to have a limited offensive biological weapons program and the capability to produce a variety of different agents. However, it is unlikely that the country maintains significant stockpiles of filled munitions (DOD 2013, 21; ROK MND 2012, 36). It follows that the DPRK would not want to part with any

[24] Furthermore, North Korea could potentially produce 12,000-20,000 tons annually in the event of a national emergency. See ROK MND (2012, 36).

of its biological agent stores, as even a small transfer to a non-state group could result in a significant downgrade in offensive biological capabilities, especially in the short term.

The DPRK likely has approximately 10-16 low-yield plutonium- and uranium-based nuclear weapons (Wertz and McGrath 2016, 12). Compared to the thousands in the arsenals of the United States and Russia, North Korea has only a few with which to ensure a deterrent capability. As such, it is extremely unlikely to provide these highly prized—and highly publicized—assets to non-state actors. However, as North Korea builds more weapons, and of an increasingly larger yield (and likely smaller physical size), the country may be more likely to sell a weapon to non-state actors, especially if the group was willing to pay top dollar. Some have argued that the DPRK's stockpile may grow rapidly over the next several years, in which case each weapon would be of less value to the regime (Albright 2015). In 2009, the Director of National Intelligence said North Korea was unlikely to sell nuclear weapons to other countries or non-state actors because the country needed its limited fissile stockpiles for its own deterrent capability; however, "the North might find a nuclear weapons or fissile material transfer more appealing if its own stockpile grows larger…" (Blair 2009, 25).

Many of the most likely radioisotopes[25] for a radiological device are commonly used in sterilization and food irradiators, smoke detectors, teletherapy, thermoelectric generators, blood/tissue irradiators, radiography, well logging, and scientific research (Acton, Rogers, and Zimmerman 2007, 154). There are many millions of potential sources of radioisotopes around the world—and it is almost certain that the DPRK has at least a few pieces of industrial, hospital, and scientific equipment containing small amounts of these elements, in addition to its nuclear waste. Therefore, Pyongyang would likely be willing to part with some radiological materials, as this would not be seen to be reducing the country's weapons stockpiles.

The DPRK has invested billions of dollars in its nuclear, chemical, and biological programs (Pearson and Park, 2016). To the extent that it would be unable to quickly replace any weapon(s) provided to a non-state group—or the extent to which a reduction in the number of CBRN weapons would reduce the regime's security—the country is unlikely to proliferate. Yet, as Pyongyang builds up its arsenals, each individual weapon is valued less, and the regime will become more likely over time to assess that it can part with one or more weapons.

LOSS OF CONTROL

Transferring CBRN material to a non-state actor means giving up control of a powerful weapon to an organization that may be unreliable: the group may waste the material in a failed attack, members may be arrested before or after an attack and reveal the source of the material, the group may use the weapon towards a goal that the state may not agree with, the group may try to blackmail the state sponsor, the group may seek attribution for political gain, or the group may choose to use the weapon in an attack on the sponsor itself. These considerations would be roughly the same for all weapon types.

On the other hand, a state may decide that the risk of transferring CBRN materials to non-state actors could be reduced by choosing an organization that it trusts (Koblentz 2009, 215-9; Bunn, Weir, and Holdren 2013, 22; Byman 2005, 51). As discussed above, North Korea has provided training, arms, and support to a variety of terrorist groups for many years. Some of these relation-

[25] Likely radioisotopes include cobalt-61, caesium-137, strontium-90, and, to a lesser extent, iridium-192, polonium-210, californium-252, and americium-241 (Acton, Rogers, and Zimmerman 2007).

ships have lasted decades, meaning that North Korea may have developed trusted contacts in several groups to whom it may be willing to provide CBRN weapons. Furthermore, because the DPRK has a history of supporting and assisting a large number of terrorist organizations, the use by any one group of a CBRN weapon would not automatically lead the international community to North Korea's doorstep—although it would be considered a primary suspect. Furthermore, Pyongyang outsourced drug production activities to transnational drug cartels operating within its borders and developed partnerships and networks with non-state actors to transport and distribute illicit wares. This indicates that the state has experience with and is at least somewhat comfortable relinquishing some direct control over an illicit activity in exchange for profit.

LIKELIHOOD OF RETALIATION

A state may refrain from providing CBRN weapons to a non-state group due to the resulting international condemnation and likelihood of retaliation, especially given the significant devastation that can be caused by CBRN weapons in terms of casualties, economic impact, and psychological damage. Fundamentally, a state's cost-benefit analysis of providing CBRN materials to a non-state group may rest on this key point: whether or not the material can be traced. Of course, if a state felt that its very existence was threatened, possible retaliation may not be much of a concern (Koblentz 2009, 215-9). Although the Trump Administration has not yet provided a detailed policy statement on the likelihood of U.S. reprisal for CBRN weapons proliferation to a non-state actor, it is likely that the harder line on North Korea that was recently signaled by Secretary Tillerson indicates that the new administration will react negatively to any such actions (Griffiths, Hancocks, and Field 2016).

The previous Republican administration under President Bush declared the United States "will hold any state, terrorist group, or other non-state actor fully accountable for supporting or enabling terrorist efforts to obtain or use weapons of mass destruction, whether by facilitating, financing, or providing expertise or safe haven for such efforts" (Hadley 2008). After North Korea's first nuclear test in 2006, President Bush announced, "the transfer of nuclear weapons or material by North Korea to states or non-state entities would be considered a grave threat to the United States, and we would hold North Korea fully accountable for the consequences of such action" (quoted in Chanlett-Avery and Squassoni 2006, 17-18). Also known as nuclear accountability and expanded deterrence, such a clear red line may deter Pyongyang from transferring CBRN weapons. However, the ability of such statements to deter depends on whether a CBRN event could be attributed to a material source with assurance—and it is unclear to both states and non-state actors whether the United States has such a capability. This matters because, depending on the likelihood of attribution, the DPRK may believe that it has sufficient deterrent force to take the chance of proliferating CBRN weapons to non-state actors.

FORENSIC ATTRIBUTION

As noted by the National Research Council, "The development and application of the forensic science disciplines to support intelligence, investigations, and operations aimed at the prevention, interdiction, disruption, attribution, and prosecution of terrorism has been an important component of both public health and… 'homeland security' for at least two decades" (National Research Council 2009, 52). The US' National Strategy for Combatting Terrorism notes the importance of rapid identification of the source and per-

petrator of a CBRN attack (2006, 15). The Departments of Defense, Energy, Homeland Security, the Federal Bureau of Investigation, the Intelligence Community, U.S. allies and treaty partners, and international organizations like the International Atomic Energy Agency and Interpol have all worked to develop CBRN forensic science capabilities (National Research Council 2009, 282).

The ability of investigators to conclusively identify the origin of CBRN material depends on a variety of factors, including the type of weapon and the attack methodology. Furthermore, the attribution process itself must meet legal and scientific standards for any potential retaliation to be seen as legitimate (Clunan 2008, 6). Conclusively determining the origin of CBRN material via forensic investigation does not necessarily mean that the perpetrator has been identified: states or groups could potentially evade attribution by stealing a pathogen from a lab in another country or buying material from an illicit marketplace (Koblentz and Tucker 2013, 590). It should be emphasized that CBRN forensics is only one important aspect of an investigation and attribution, and would be combined with forensic analysis of other physical evidence—such as DNA, hair, fibers, tool or machine marks on devices, writing or labels, and fingerprints—as well as an in-depth law enforcement investigation in order to establish the route from supplier to user and develop a case for attribution (Lee, Palmbach, and Buturla 2004, 376; Dunlop and Smith 2006).

Chemical. The developing field of chemical forensics seeks to utilize analytical techniques to attribute weaponized chemicals to their source. Traditionally, individual sources of chemicals have not often been evaluated,[26] and the ability to do so depends in large part on how widespread use of any given chemical is. Chemical forensics is complicated by the vast number of chemicals available from commercial sources and the matching chemical signatures of chemicals produced. Attribution signatures are made up of anomalies and trace materials in chemical agents and their degradants, including additives and impurities. These signatures can be significant based on the absence, presence, and relative intensity of these anomalies and trace materials. A variety of techniques have been investigated to determine attribution signatures for toxic chemicals, including impurity profiling, stereoisomeric ratios, and stable isotopic ratios (Fraga et al 2011, 9564; Halford 2012).

However, the current nascent state of the chemical forensics field does not appear likely to successfully attribute a chemical attack back to the source of the agent. As such, North Korea may be disposed to provide this type of CBRN weapon to a non-state group.

Biological. An effective capacity to attribute a biological attack is "essential" for deterring use—and transfer to non-state groups—of biological weapons. Microbial forensics, or bioforensics, utilizes sophisticated scientific techniques to determine the physical, genetic,[27] and chemical properties of a biological agent used in an attack (Koblentz and Tucker 2013, 580-7). The bioforensic toolkit includes organic and inorganic analytical chemistry, genetic engineering, rapid diagnostic assay systems, and electron microscopy (National Research Council 2009, 282). The discipline has been growing quickly, especially after the 2001 anthrax letter attacks in the United States. Technological improvements have allowed faster and more exact sequencing of pathogen samples, while analysis of various aspects of the source organism can determine how the

[26] This refers in part to the establishment of an extensive "library" of information on which chemicals are manufactured where and what different signatures may be detectable in different chemicals from different sources.

[27] Genetic markers that can be utilized in attribution analysis include single nucleotide polymorphisms, insertions and deletions, pathogenicity islands, housekeeping genes, whole genomes, repetitive sequences, mobile elements (i.e., bacteriophages, transposons, plasmids, insertion elements, and integrons), virulence and resistance genes, and structural genes (Budowle et al 2007, 441).

agent was manufactured, its age, and its geographic source (Koblentz and Tucker 2013, 583-8). The United States is also developing a National Bioforensic Reference Collection to obtain and store reference materials for microbial forensic analysis, with a library of more than 30,000 samples of viruses, bacteria, and toxins (Sterns 2009, 20).

Yet, there are significant limitations in both operational capability and scientific understanding. Microbial forensics is an emerging discipline facing "substantial scientific challenges to provide a robust suite of technologies for identifying the source of a biological threat agent and attributing a biothreat act to a particular person or group" (National Research Council 2014, 7).[28] Many pathogens are available from many sources, including laboratories and nature—and biological agents do not necessarily have unique genetic "fingerprints." Pathogens are also constantly replicating, evolving, and mutating. Some key pathogens that could be used in an attack remain understudied, while new agents can also be created and used in attacks. Furthermore, biological attacks may be more complicated to attribute than chemical or nuclear in large part because it may not be clear for days or weeks that an attack has even occurred.

Therefore, the current state of microbial forensics is unlikely to dissuade the DPRK from providing biological weapons to non-state actors. The regime likely expects that an attack—even if determined to be intentional—would not be traced back. Were the country to pass bioweapons to a non-state group, it may be more likely to hedge its bets and pass on pathogens of lower lethality, such as the causative agent of cholera, which could reasonably be perceived as natural outbreaks.

Nuclear and Radiological. Nuclear forensics methods can yield significant information about the history and composition of nuclear and radiological materials by determining their chemical, physical, isotopic, elemental, and environmental characteristics (Weitz 2011). Each isotope has a unique half-life and gamma ray signature, so scientists would be able to obtain accurate measurements of many isotopes in the debris (Dunlop and Smith 2006). In many cases, such material may "bear the unmistakable 'signature' of the countries that manufactured their nuclear material," with information that can be used to trace the material back to uranium mines, enrichment facilities, or reactors (Clunan 2009, 3; Lieber and Press 2013, 85). Isotopic data from debris can be compared with databases of radioisotope, plutonium, and uranium samples from around the world—at the very least to support a process of elimination (Dunlop and Smith 2006).

Based on the high attribution rates of conventional terrorist attacks in the West and the even greater effort likely in the event of CBRN terrorism, Keir Lieber and Daryl Press (2013, 83) have argued, "neither a terror group nor a state sponsor would remain anonymous after a nuclear terror attack." However, significant technical and political developments are required before the field of nuclear forensics can be considered mature. Furthermore, radiological sources are likely to be exceedingly difficult to trace back to a specific source (Weitz 2011). Chestnut (2007, 106) points to the difficulty of forensically linking nuclear material in past instances of state-to-state proliferation and argues that "the DPRK may believe that inadequate technical attribution capabilities and lack of international political will might allow a transfer [of nuclear material] with impunity."

Pyongyang could assess a high likelihood that any nuclear material (weapon or fissile material) used by a terrorist or other non-state actor would be traced back to the regime, and therefore is unlikely to provide nuclear weapons or fissile material to such groups. On the other hand, this analysis does not hold in the case of radiological material: because such sources of radioisotopes are so common,

[28] Microbial forensic evidence can be placed on a forensic attribution-exclusion continuum; however, only rarely can these methods be used to identify a perpetrator with complete certainty (Koblentz and Tucker 2013, 583-8).

attribution to a specific country based on forensic techniques would be very difficult. As such, North Korea would be more inclined to proliferate radioisotope sources to non-state actors.

CONCLUSION

What is the likelihood that North Korea will become a chemical, biological, radiological, or "Nukes'R'Us, supplying weapons to whoever could pay—including terrorists" (Allison 2004, 72)? This paper has evaluated Pyongyang's CBRN stockpile; analyzed the DPRK's past illicit activities, weapons sales, and support for terrorism; and assessed the key considerations for Pyongyang in providing CBRN weapons to non-state actors, concluding that while North Korea has the means, it is unlikely to do so.[29] However, assessing the potential cost-benefit analysis of each weapon type, as shown in Table 2, indicates variations. North Korea is least likely, for now, to provide nuclear weapons or biological agents to a non-state group. Pyongyang is comparatively more likely to proliferate chemical or certain types of radiological weapons to non-state actors.[30] If North Korea does provide chemical agents or radioisotopes to a group that subsequently uses them, the attack would at least likely have low consequences in terms of casualties.

[29] The important decision-making consideration of motivation has not been addressed in this paper. There may be an infinite number of different motivations, depending on the specific situation, for Pyongyang to provide CBRN weapons to terrorists—and without a specific scenario, it is virtually impossible to analyze motivations. If Pyongyang actively wants to damage the United States in terms of infrastructure or casualties, proliferation of nuclear weapons to a terrorist group may become much more compelling. On the other hand, if North Korea wants to harm the US economy but reduce potential retaliation, it may choose to proliferate a bioagent that causes an outbreak among food crops or animals.

[30] Not fissile material that could be used for nuclear weapons.

Table 2. Key DPRK Considerations in CBRN Proliferation to Non-State Actors

		Chemical	Biological	Radiological	Nuclear
Restraining Force of International Norms		Low	High	Medium	High
Economic Value[31]		Low	Medium	Low	High
Value to the Regime	Defense and Diplomacy	High	High	Medium	High
	Size of Arsenal (Reticence to Spare)	Large (low)	Small (high)	Medium (medium)	Small (high)
Potential Repercussions from Loss of Control		High	High	High	High
Expected Retaliation and Regime's Survival[32]		Medium	Medium	Medium	Medium
Likelihood of Attribution ("State of the Science")		Low	Low	Low-medium	High
Final Relative Calculation of Relative Likelihood to Proliferate CBRN Weapons to Non-State Actors		**High**	**Low**	**High**	**Low**

These conclusions lead to several implications for the United States and other countries worried about a CBRN attack. While these policy proscriptions are not necessarily novel, they do bear emphasizing. In general, the fears of a CBRN attack are likely exaggerated, and policies focused solely on reducing this threat should be subjected to a more realistic cost-benefit analysis. Even if a "rogue" state such as North Korea were to provide CBRN material to a non-state group, there are still a variety of other steps and constraints in the process of successfully carrying out a CBRN attack, including several "choke points" that could better be the focus of policy and

[31] The expected monetary value should Pyongyang choose to sell a weapon.

[32] This is closely linked to likelihood of attribution.

interdiction efforts. Similarly, states worried about a CBRN attack should be more realistic in describing both the threat and their capabilities to counter it. Al Qaeda reportedly only became interested in biological weapons after hearing US officials discuss the potential for catastrophic effects in the hands of terrorists and US vulnerabilities to this form of attack (Leitenberg 2005, 35). In addition, the United States has tended towards strong reticence in discussing pre-attack detection capabilities, plans for protecting the populace, and abilities to determine the source of an attack. While such silence helps protect specific US capabilities and procedures, understating US abilities to attribute an attack has limited deterrent effect. Downplaying US capacity could in fact increase the likelihood of an attack by causing potential proliferators to believe that they could successfully provide CBRN materials to a non-state group without any serious threat of attribution. As such, the United States should make clear that it can detect and interdict, reduce the effects of, and attribute a CBRN attack, while providing little detail about exactly how this is to be done (see also Koblentz and Tucker 2013). Finally, North Korea is more likely to sell CBRN materials to non-state groups if the country has few other economic options. Were the DPRK to return to the negotiating table, innovative ways to alleviate the country's need for funds generated from illicit activities may reduce the potential risk of North Korea selling its CBRN weapons.

It should be noted there are a variety of other ways for non-state actors to obtain CBRN weapons from North Korea. Pyongyang's CBRN technologies and materials may be poorly guarded and could be exploited or stolen by security personnel and transferred to other states, criminal groups, or terrorist organizations. After multiple visits to North Korea, Dr. Siegfried Hecker has noted that he had seen "little recognition of the safety hazards posed by primitive nuclear bombs" indicating both safety and security issues in DPRK handling of nuclear weapons (quoted in Chestnut 2007, 103). This likely extends to the country's chemical, biological, and especially radiological sources. Bureaucrats in charge of weapons facilities may sell some of "their" CBRN material on the black market. Similarly, amidst the country's ongoing economic troubles, guards at weapons facilities could be bribed to provide weapons to non-state actors or to allow them access to steal material.[33] If circumstances changed and the regime felt especially directly threatened by external sources, such as a US or South Korean strike, the country may choose to undertake a CBRN attack or give such weapons to non-state actors such as terrorists to use in Washington or Seoul. In the event of a chaotic implosion of the regime or external attack, weapons facilities may be less well guarded, providing additional opportunities for enterprising non-state groups.[34]

[33] Alternatively, those in charge of CBRN weapons could proliferate these weapons to terrorists because they are sympathetic to a specific terrorist group's cause.

[34] Yet, historical evidence—China during the Cultural Revolution and the fall of the USSR—indicates that it is still possible for states in chaos and/or collapse to maintain sufficient security of their CBRN infrastructure (Tepperman 2009).

REFERENCES

Acton, James M., M. Brooke Rogers, and Peter D. Zimmerman. 2007. Beyond the Dirty Bomb: Re-Thinking Radiological Terror. Survival 49 (3): 151–68.

Albright, David. 2015. Future Directions In The DPRK's Nuclear Weapons Program: Three Scenarios for 2020. US-Korea Institute at SAIS.

Albright, David, Paul Brannan, and Andrea Scheel Stricker. 2013. Detecting and Disrupting Illicit Nuclear Trade after A.Q. Khan. In Weapons of Mass Destruction and Terrorism, edited by James J.F. Forest and Russell D. Howard, Second. New York: McGraw Hill.

Allison, Graham. 2004. How to Stop Nuclear Terror. Foreign Affairs 83 (1): 65–74.

———. 2010. Nuclear Disorder: Surveying Atomic Threats. Foreign Affairs 89 (1): 74–85.

Bach, William. 2002. Drugs, Counterfeiting, and Weapons Proliferation: The North Korean Connection. Washington DC: U.S. Government Printing Office.

Bechtol Jr, Bruce. 2013. Interview: Syria, Iran Main Buyers of North Korean Chemical Weapons. Radio Free Asia, October 3. http://www.rfa.org/english/news/korea/interview-10032013130040.html. Accessed May 10, 2015.

Bechtol Jr, Bruce E. 2009. Creating Instability in Dangerous Global Regions: North Korean Proliferation and Support to Terrorism in the Middle East and South Asia. Comparative Strategy 28 (2): 99–115.

———. 2010. North Korea and Support to Terrorism: An Evolving History. Journal of Strategic Security 3 (2): 45–54.

Becker, Jasper. 2005. Rogue Regime: Kim Jong Il and the Looming Threat of North Korea. Oxford: Oxford University.

Becker, Olivia. 2015. Privileged Wives in North Korea Are Apparently Using Meth to Lose Weight. Vice News. August 3. Available https://news.vice.com/article/privileged-wives-in-north-korea-are-apparently-using-meth-to-lose-weight. Accessed September 27, 2015.

Berger, Andrea. 2014. North Korea, Hamas, and Hezbollah: Arm in Arm? 38 North, August 5. Available http://38north.org/2014/08/aberger080514/. Accessed May 10, 2015.

Berger, Andrea, and Ching N. Fung. 2015. Business or Pleasure? A N. Korean-Cambodian Arrested in Hawaii. NKNews.org. August 7. Available https://www.nknews.org/2015/08/business-or-pleasure-a-n-korean-cambodian-arrested-in-hawaii/. Accessed September 27, 2015.

Bermudez Jr., Joseph S. 2013. North Korea's Chemical Warfare Capabilities. 38 North. October 10. Available http://38north.org/2013/10/jbermudez101013/. Accessed May 10, 2015.

Blair, Dennis C. 2009. Annual Threat Assessment of the Intelligence Community for the Senate Select Committee on Intelligence. Senate Select Committee on Intelligence, February 12.

Budowle, Bruce, Jodi A. Beaudry, Neel G. Barnaby, Alan M. Giusti, Jason D. Bannan, and Paul Keim. 2007. Role of Law Enforcement Response and Microbial Forensics in Investigation of Bioterrorism. Croatian Medical Journal 48 (4): 437–49.

Bunn, Matthew, Anthony Weir, and John P. Holdren. 2003. Controlling Nuclear Warheads and Materials. Cambridge: Project on Managing the Atom, Harvard University.

Byman, Daniel. 2005. Deadly Connections: States That Sponsor Terrorism. Cambridge: Cambridge University.

Byman, Daniel L. 2008. The Changing Nature of State Sponsorship of Terrorism. The Saban Center for Middle East Policy: The Brookings Institution.

Carter, Ashton B. 2015. Erin Burnett Outfront: Defense Secretary's First In-Depth Interview. Available http://transcripts.cnn.com/TRANSCRIPTS/1504/10/ebo.01.html. Accessed April 3, 2016.

Chang, Jae-soon. 2014. U.S. Court Finds N. Korea Liable for Sup-

porting Rocket Attacks on Israel. Yonhap News. July 24. Available http://english.yonhapnews.co.kr/northkorea/2014/07/24/39/0401000000AEN20140724000351315F.html. Accessed May 10, 2015.

Chanlett-Avery, Emma, and Sharon A. Squassoni. 2006. North Korea's Nuclear Test: Motivations, Implications, and U.S. Options. Congressional Research Service.

Cha, Victor. 2012. The Impossible State: North Korea, Past and Future. New York: HarperCollins.

Cha, Victor D. 2002. North Korea's Weapons of Mass Destruction: Badges, Shields, or Swords? Political Science Quarterly 117 (2): 209–30.

Chestnut Greitens, Sheena. 2014. Illicit: North Korea's Evolving Operations to Earn Hard Currency. Washington DC: Committee for Human Rights in North Korea.

Chestnut, Sheena. 2007. Illicit Activity and Proliferation: North Korean Smuggling Networks. International Security 32 (1): 80-111.

Clapper, James R. 2014. Worldwide Threat Assessment of the US Intelligence Community. US Senate Select Committee on Intelligence. January 29.

Clunan, Anne L. 2008. Identifying Biological Agents, Characterizing Events, and Attributing Blame. In Terrorism, War, or Disease: Unraveling the Use of Biological Weapons, edited by Anne L. Clunan, Peter R. Lavoy, and Susan B. Martin, 1–20. Stanford: Stanford Security Studies.

Coe, Andrew J. 2005. North Korea's New Cash Crop. The Washington Quarterly 28 (3): 73–84.

Coughlin, Con. 2014. Hamas and North Korea in Secret Arms Deal. The Telegraph. July 26. Available http://www.telegraph.co.uk/news/worldnews/middleeast/palestinianauthority/10992921/Hamas-and-North-Korea-in-secret-arms-deal.html. Accessed May 10, 2015.

Defense White Paper. 2012. Republic of Korean Ministry of National Defense.

Department of Defense. 2000. 2000 Report to Congress: Military Situation on the Korean Peninsula.

———. 2013. Military and Security Developments Involving the Democratic People's Republic of Korea 2013.

Department of State. 2015. Country Reports on Terrorism 2014.

DPRK: Chemical Weapons. 2011. Global Security. July 24. Available http://www.globalsecurity.org/wmd/world/dprk/cw.htm. Accessed May 10, 2015.

Dunlop, William, and Harold Smith. 2006. Who Did It? Using International Forensics to Detect and Deter Nuclear Terrorism. Arms Control Association. October 1. Available https://www.armscontrol.org/act/2006_10/CVRForensics. Accessed May 10, 2015.

Eberstadt, Nicholas. 2003. Corruption in North Korea's Economy. Washington DC.

Farah, Joseph. 2006. North Korea Trying to Weaponize Bird Flu. WND. May 8. Available http://www.wnd.com/2006/05/36065/. Accessed May 10, 2015.

Ferguson, Charles D., and Michelle M. Smith. 2013. Assessing Radiological Weapons: Attack Methods and Estimated Effects. In Weapons of Mass Destruction and Terrorism, 185–99. New York: McGraw Hill.

Fraga, Carlos G., Gabriel A. Pérez Acosta, Michael D. Crenshaw, Krys Wallace, Gary M. Mong, and Heather A. Colburn. 2011. Impurity Profiling to Match a Nerve Agent to Its Precursor Source for Chemical Forensics Applications. Analytical Chemistry 83 (24): 9564–72.

Gale, Alastair. 2014. Defectors Detail How North Korea's Office 39 Feeds Leader's Slush Fund. Wall Street Journal. September 15. Available http://www.wsj.com/articles/defectors-detail-how-north-koreas-office-39-filters-money-to-kims-private-slush-fund-1410823969. Accessed May 10, 2015.

Griffiths, James, Paula Hancocks, and Alexandra Field. 2017. Tillerson on North Korea: Military Action Is 'an Option.' CNN.

March 17. Available http://www.cnn.com/2017/03/17/politics/tillerson-south-korea-dmz/index.html. Accessed March 29, 2017.

Grisafi, John G. 2015. N. Korea Involved with Syrian Nuke Site – Der Spiegel. NKNews.org. January 13. Available http://www.nknews.org/2015/01/n-korea-involved-with-syrian-nuke-site-der-spiegel/. Accessed May 10, 2015.

Hadley, Stephen. 2008. Remarks by the National Security Advisor, Stephen Hadley, to the Center for International Security and Cooperation. Center for International Security and Cooperation, Stanford University, Stanford, California, February 8.

Halford, Bethany. 2012. Tracing A Threat. Chemical & Engineering News. February 6. Available http://cen.acs.org/articles/90/i6/Tracing-Threat.html. Accessed May 10, 2015.

Hamilton, Keegan. 2014. North Korean Meth, Motorcycle Gangs, Army Snipers, and a Guy Named Rambo. Vice News. March 18. Available https://news.vice.com/article/north-korean-meth-motorcycle-gangs-army-snipers-and-a-guy-named-rambo. Accessed September 29, 2015.

Harrison, Selig. 2004. Inside North Korea: Leaders Open to Ending Nuclear Crisis. Financial Times. May 4. Available http://carnegieendowment.org/2004/05/04/inside-north-korea-leaders-open-to-ending-nuclear-crisis. Accessed February 21, 2015.

Hecker, Siegfried S. 2010. What I Found in North Korea. Foreign Affairs. December 9.

Horowitz, Michael J. 2003. Corruption in North Korea's Economy. Washington DC.

Irish, John. 2015. North Korean Nuclear, Missile Experts Visit Iran - Dissidents. Reuters UK. May 28. Available http://uk.reuters.com/article/uk-iran-northkorea-dissidents-idUKKBN0OD08020150528. Accessed September 27, 2015.

Kan, Paul Rexton, Bruce E. Bechtol, Jr., and Robert M. Collins. 2010. Criminal Sovereignty: Understanding North Korea's Illicit International Activities. Strategic Studies Institute.

Kaplan, David E., and Andrew Marshall. 1996. The Cult at the End of the World: The Terrifying Story of the Aum Doomsday Cult, from the Subways of Tokyo to the Nuclear Arsenals of Russia. New York: Crown Publishers.

Kelly, James A. 2004. Dealing with North Korea's Nuclear Programs. US Department of State. Washington DC.

Kerr, Paul K., Stephen A. Hildreth, and Mary Beth D. Nikitin. 2015. Iran-North Korea-Syria Ballistic Missile and Nuclear Cooperation. Congressional Research Service.

Kerr, Paul K., Mary Beth D. Nikitin, and Steven A. Hildreth. 2014. Iran-North Korea-Syria Ballistic Missile and Nuclear Cooperation. Congressional Research Service.

Koblentz, Gregory D. 2009. Living Weapons: Biological Warfare and International Security. Cornell: Cornell University.

Koblentz, Gregory D., and Jonathan B. Tucker. 2013. Tracing an Attack: The Promise and Pitfalls of Microbial Forensics. In Weapons of Mass Destruction and Terrorism, 579–96. New York: McGraw Hill.

Koo, Jun Hoe. 2014. Son of Purged Aide Escapes Forced Repatriation to NK. DailyNK. November 20. Available http://renewal.dailynk.com//english/read.php?num=12579&cataId=nk00100. Accessed May 10, 2015.

Korean Central News Agency (KCNA). 2013. GFTUK Spokesman Supports New Strategic Line, April 4. Available www.kcna.co.jp/item/2013/201304/news04/20130404-12ee.html. Accessed May 10, 2015.

Kyodo News Agency. 2005. N. Korea Warns of Nuke Proliferation Possibility: US Scholar, April 9. Available https://www.thefreelibrary.com/N.+Korea+warns+of+nuke+proliferation+possibility%3a+U.S.+scholar.-a0131327343. Accessed May 10, 2015.

Lamberth, Royce C. 2014b. Chaim Kaplan, et al v. Central Bank of the Islamic Republic of Iran, et al. United States District Court for the District of Columbia.

———. 2014a. Chaim Kaplan, et al v. Hezbollah, et al. United States District Court for the District of Columbia.

Lee, Henry C., Timothy M. Palmbach, and John J. Buturla. 2004. Scene Investigation: The Role of Law Enforcement and Forensic Scientists. In Forensic Aspects of Chemical and Biological Terrorism, edited by Cyril H. Wecht. Tucson: Lawyers & Judges.

Leitenberg, Milton. 2005. Assessing the Biological Weapons and Bioterrorism Threat. Army War College.

Lieber, Keir A., and Daryl G. Press. 2013. Why States Won't Give Nuclear Weapons to Terrorists. International Security 38 (1): 80–104.

Manyin, Mark E., and et al. 2015. North Korea: Back on the State Sponsors of Terrorism Lists? Congressional Research Service.

McLaughlin, Seth. 2013. White House Pressed to Rename North Korea as a State Sponsor of Terrorism. The Washingtion Times. April 2.Available http://www.washingtontimes.com/news/2013/apr/2/white-house-pressed-rename-north-korea-state-spons/. Accessed May 10, 2015.

Mohammed, Arshad, and Tabassum Zakaria. 2008. U.S. Says North Korea Gave Syria Nuclear Assistance. Reuters. April 25. Available http://in.reuters.com/article/2008/04/25/idINIndia-33230520080425. Accessed May 10, 2015.

Nanto, Dick K. 2009. North Korean Counterfeiting of U.S. Currency. Congressional Research Service.

National Research Council. 2009. Strengthening Forensic Science in the United States: A Path Forward. Washington DC: The National Acadamies Press.

———. 2014. Science Needs for Microbial Forensics: Developing Initial International Research Priorities. Washington DC: The National Acadamies Press.

Nikitin, Mary Beth. 2013. North Korea's Nuclear Weapons: Technical Issues. Congressional Research Service.

Niksch, Larry A. 2010. North Korea: Terrorism List Removal. Congressional Research Service.

Office of the President of the United States. 2002. National Security Strategy of the United States.

———. 2006. National Strategy for Combating Terrorism.

Oliemans, Joost, and Stijn Mitzer. 2015. North Korea and Libya: Friendship through Artillery. January 5. Available http://www.nknews.org/2015/01/north-korea-and-libya-friendship-through-artillery/. Accessed May 10, 2015.

Parachini, John. 2000. Collapsing States and Abrupt Regime Changes: Implications for NBC Terrorism. In Hype or Reality? The New Terrorism and Mass Casualty Attacks, edited by Brad Roberts, 83–108. Alexandria: Chemical and Biological Arms Control Institute.

Perl, Raphael F. 2007. Drug Trafficking and North Korea: Issues for U.S. Policy. Congressional Research Service.

Peters, Robert J. 2015. The WMD Challenges Posed by a Collapse of North Korea. 38 North. April 14. Available 38north.org/2015/04/rpeters041415/. Accessed May 10, 2015.

Profile for North Korea: Biological Weapons. December 2014a. NTI: Nuclear Threat Initiative. Available http://www.nti.org/country-profiles/north-korea/biological/. Accessed March 28, 2017.

Profile for North Korea: Chemical Weapons. December 2014b. NTI: Nuclear Threat Initiative. http://www.nti.org/country-profiles/north-korea/chemical/. Accessed March 28, 2017.

Profile for North Korea: General. 2015. NTI: Nuclear Threat Initiative. April. Available http://www.nti.org/country-profiles/north-korea/. Accessed May 10, 2015.

Radio Free Asia. 2014. Suspected North Korean Government Agents Assault Refugee in Denmark. December 17. Available http://www.rfa.org/english/news/korea/assault-12172014183304.html. Accessed May 10, 2015.

Rossett, Claudia. 2014. Eyes Wide Shut to North Korea's Terror Ties. Forbes. May 12. Available http://www.forbes.com/sites/clau-

diarosett/2014/05/12/eyes-wide-shut-to-north-koreas-terror-ties/. Accessed May 10, 2015.

Roy, Denny. 1994. North Korea and the 'Madman' Theory. Security Dialogue 2 (3): 307–16.

Sky News. 2015. North Korea 'Should Be Back On US Terror List.' April 27. Available news.sky.com/story/north-korea-should-be-back-on-us-terror-list-10361880. Accessed September 27, 2015.

Solomon, Jay, and Jason Dean. 2003. Heroin Busts Point to Source of Funds for North Koreans. The Wall Street Journal. April 23. Available www.wsj.com/articles/SB105106006946882000. Accessed April 29, 2015.

Stanton, Joshua. 2015. Arsenal of Terror: North Korea, State Sponsor of Terrorism. The Committee for Human Rights in North Korea.

Stanton, Joshua, and Sung-yoon Lee. 2014. Pyongyang's Hunger Games. The New York Times. March 7. Available http://www.nytimes.com/2014/03/08/opinion/pyongyangs-hunger-games.html. Accessed May 10, 2015.

Sterns, T. et al. 2009. Microbial Forensics. JASON (The MITRE Corporation); Department of Defense.

Talmadge, Caitlin. 2007. Deterring a Nuclear 9/11. The Washington Quarterly 30 (2): 21–34.

Tepperman, Jonathan. 2009. How Nuclear Weapons Can Keep You Safe. Newsweek. August 28. Available http://www.newsweek.com/how-nuclear-weapons-can-keep-you-safe-78907. Accessed February 21, 2015.

Weitz, Richard. 2011. Nuclear Forensics: False Hopes and Practical Realities. Political Science Quarterly 126 (1): 53–75.

Wertz, Daniel, and Matthew McGrath. 2016. Issue Brief: North Korea's Nuclear Weapons Program. The National Committee on North Korea. Available http://www.ncnk.org/resources/publications/DPRK-Nuclear-Weapons-Issue-Brief. Accessed March 29, 2017.

Wyler, Liana Sun, and Dick K. Nanto. 2008. North Korean Crime-for-Profit Activities. Congressional Research Service.

York, Rob. 2015. North Announces Anti-Money Laundering Panel. NKNews.org. February 4. Available http://www.nknews.org/2015/02/north-announces-anti-money-laundering-panel/. Accessed February 21, 2015.

Zarate, Juan C. 2013. Treasury's War: The Unleashing of a New Era of Financial Warfare. New York: Public Affairs.

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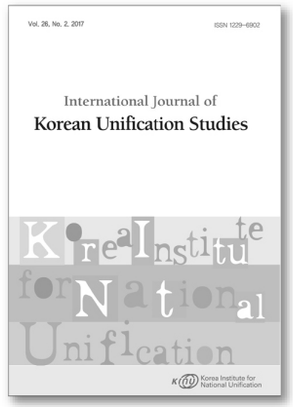

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THE PROSPECTS FOR U.S.-DPRK RELATIONS AND
U.S.-ROK COORDINATION ON THE NORTH KOREAN POLICY
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