



*Report of the*

International Study Group  
*on North Korea Policy*

Adam Mount & Andrea Berger  
*Study Directors*





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# *About FAS*

The Federation of American Scientists (FAS) is an independent, nonpartisan think tank that brings together members of the science and policy communities to collaborate on mitigating global catastrophic threats. Founded in November 1945 as the Federation of Atomic Scientists by scientists who built the first atomic bombs during the Manhattan Project, FAS is devoted to the belief that scientists, engineers, and other technically trained people have the ethical obligation to ensure that the technological fruits of their intellect and labor are applied to the benefit of humankind. In 1946, FAS rebranded as the Federation of American Scientists to broaden its focus to prevent global catastrophes.

Since its founding, FAS has served as an influential source of information and rigorous, evidence-based analysis of issues related to national security. Specifically, FAS works to reduce the spread and number of nuclear weapons, prevent nuclear and radiological terrorism, promote high standards for the safety and security of nuclear energy, illuminate government secrecy practices, and prevent the use of biological and chemical weapons.

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Photo by David Guttenfelder, National Geographic Creative.

*A man rides his bicycle on a rural road between Pyongyang and Kaesong, North Korea.*

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*Members of the study group participated in an individual capacity. Neither the report as a whole nor the contributions of members are representative of any institution or nation. Study group members endorse the general approach of the consensus report but not necessarily every provision.*



# *Acknowledgements*

What is our policy toward North Korea if we can't eliminate its nuclear arsenal in the near future?

Over the last two years—as we moved from fire and fury threats, through the first tests of North Korea's intercontinental ballistic missiles, into negotiations that have neither resulted in significant limits on the nuclear arsenal nor addressed a range of other challenges including human rights—this question has become increasingly urgent. It is not a question that can be answered with recommendations for the next weeks and months but will require the United States and its allies to undertake a basic reassessment of what their interests are and what they can realistically hope to achieve.

To develop a realistic and sustainable policy toward a North Korea that will in all likelihood remain nuclear-armed for the foreseeable future, the Federation of American Scientists (FAS) has convened an International Study Group on North Korea Policy. The project brought together twelve experts who have challenged the assumption of immediate disarmament and made innovative proposals on a politically-sensitive issue. Each has contributed critical ideas and then repeatedly engaged in collaborative reviews to refine the text. We are grateful for their creativity, their knowledge, and their willingness to compromise, which made the process not only intellectually exhilarating but also a genuine pleasure.

The study group is indebted to several experts and staff members who helped to advise and facilitate our endeavor.

The group held three meetings over the spring and summer of 2018 and is grateful to those who helped facilitate these meetings: Hahm Chaibong, Choi Kang, Kim Dae-hong, Roju Chung, and several other staff members at the Asan Institute in Seoul; the staff of the International House of Japan; and the staff at the James Martin Center for Nonproliferation Studies (CNS) Washington, DC office.

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Matt Korda, Scott LaFoy, Keith Luse, Vince Manzo, Adena Peckler, Jeong-ho Roh, Laura Rosenberger, Scott Snyder, Sugio Takahashi, Wi Sunglac, Jon Wolfsthal, Juan Zarate as well as several government officials in the United States, South Korea, Japan, and European nations provided data, advice, or shared their perspective on these issues. Josh Pollack read an early draft of the report and provided helpful advice. Seongmin Lee’s knowledge of North Korean society lent a crucial perspective and helpful ideas to those sections of the report. Olivia Enos, Catherine Killough, and Dan Wertz shared their expertise with the group during its Washington meeting. The next generations will inherit a very different North Korea challenge—one that is open-ended and complex rather than directed teleologically at a discrete objective. The fairness and effectiveness of our policies will be determined by our ability to represent the views and interests of the coming generations.

The study group’s greatest debt is to Abigail Stowe-Thurston, who was instrumental in assembling the group, managing the meetings, and drafting the report. She not only integrated and sharpened the group’s arguments but made several critical substantive and stylistic contributions to the text.

The staff at the Federation of American Scientists were indispensable for managing the group and producing the report. FAS President Ali Nouri ensured that the organization was a supportive and effective home for the project. Pia Ulrich ably managed the group’s complex finances. Frankie Guarini expertly handled printing and layout of the report. Each provided helpful advice and indispensable support. The study group’s deliberations were neither influenced nor endorsed by FAS as an organization.

At the Center for Nonproliferation Studies, Shea Cotton provided key logistical support for the group as well as knowledgeable input into the group’s deliberations. Noah Williams helped handle the necessary arrangements between our two and Rhianna Kreger lent her expert eye to copyediting the report text.

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None of those mentioned here, nor their organizations, share any responsibility for the content of the report.

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# *Acronyms*

ASEAN	Association of Southeast Asian Nations
COI	Commission of Inquiry
DMZ	Demilitarized Zone
DPRK	Democratic People's Republic of Korea (North Korea)
ELWR	Experimental Light-Water Reactor
FAO	Food and Agriculture Organization of the United Nations
ICBM	Intercontinental Ballistic Missile
IRBM	Intermediate-Range Ballistic Missile
ILO	International Labor Organization
NATO	North Atlantic Treaty Organization
NC3	Nuclear Command, Control, and Communications
NLL	Northern Limit Line
OECD	Organisation for Economic Cooperation and Development
PSI	Proliferation Security Initiative
ROK	Republic of Korea (South Korea)
TB/MDR-TB	Tuberculosis/Multiple Drug Resistant Tuberculosis
TEL	Transporter Erector Launcher
TPMP	Transnational Project Management Process
UN	United Nations
UNHRC	United Nations Human Rights Council
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
UNSCR	United Nations Security Council Resolution
US	United States
WMD	Weapons of Mass Destruction
WPK	Workers Party of Korea

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# 1. *Introduction & Summary*

In July of 2017, North Korea tested the Hwasong-14, its first intercontinental ballistic missile (ICBM). Almost five months later, the first test of another ICBM, the Hwasong-15, credibly demonstrated the regime's ability to strike at the continental United States with a nuclear-armed ballistic missile. The tests marked the failure of a decades-long international effort to prevent North Korea from acquiring nuclear weapons and the means to deliver them.

A growing consensus of experts warn that North Korea is unlikely to eliminate its nuclear arsenal in the foreseeable future.<sup>1</sup> But while there have been efforts to approach the current situation from more realistic assumptions<sup>2</sup> and to articulate new approaches to specific elements of North Korea policy,<sup>3</sup> there have been relatively few attempts to reassess US and allied interests and to propose a coherent and realistic strategy for meeting them.<sup>4</sup>

The unrealistic goal of rapidly dismantling the North Korean nuclear arsenal has consumed the military, economic, and diplomatic policies of the United States and its allies. However, an exclusive pursuit of disarmament will come at the cost efforts to manage other critical interests, including the risks of conventional war, ballistic missile proliferation, contagion of infectious disease, and the continued suffering and repression of the North Korean people. The tendency to ignore interests other than disarmament is especially costly at a time when Pyongyang stands at a critical military, economic, and social juncture that will determine whether its nuclear arsenal expands indefinitely and is used to coerce and intimidate its neighbors; whether markets and consumer technologies become permanent instruments of state repression, poverty, social stratification, and sexism within North Korea; whether the regime's cyber, financial, and other criminal activity becomes a permanent threat to the international system or can

1. Rapp-Hooper 2017; Narang and Panda 2018; Wolfsthal 2017; Lewis 2018; O'Neil 2007. Public reports have suggested that portions of the US intelligence community have also assessed that North Korea is unlikely to eliminate its nuclear arsenal: Kube, Dilanian, and Lee 2018; Nakashima and Warrick 2018b; Nakashima and Warrick 2018a.
2. In addition to the analysts cited above, see Magsamen et al. 2017; Rice 2018; International Crisis Group 2018; Mullen, Nunn, and Mount 2016; Ford 2018.
3. On deterrence and defense, see Manzo and Warden 2017; Warden and Panda 2019; Bell and Macdonald 2018; Shiffrin 2018; Denmark 2017. On diplomacy, see Moon 2019. On information operations, see Malinowski 2017.
4. Cheon 2017; Mount 2018; Magsamen 2018. Park and Walsh 2016.

be contained at manageable levels. If security, economic, and humanitarian trends continue unchanged, Pyongyang will expand its abilities to aggress against the United States and its allies and to fund its activities through economic development at home and illicit activity abroad over the next two decades.

The pursuit of immediate disarmament has not only distracted from a range of pressing challenges; it has also exacerbated them. Allied deterrence and diplomatic policy has generated incentives for Pyongyang to expand, diversify, and conceal its nuclear arsenal. In its current form, the international sanctions regime has unnecessarily contributed to the suffering of the North Korean people from privation and infectious disease, and may have helped to enhance the regime's overseas illicit networks.<sup>5</sup> Attempts to isolate the regime have aided its attempts to isolate the North Korean people from the international community. The challenge of negotiations and a series of missteps have caused strains between Washington, Seoul, and Tokyo.

There is no mix of economic, diplomatic, or military pressure that can verifiably eliminate North Korea's arsenal on acceptable terms in the next few years.<sup>6</sup> The United States and its allies can no longer rely on the assumption that North Korea will rapidly eliminate its nuclear arsenal.

The FAS International Study Group on North Korea Policy convened to develop a strategy toward a North Korea that will in all likelihood remain nuclear-armed and under the control of the Kim family for the next two decades. The composition of the group reflects a conviction that a sustainable and realistic strategy must draw on the expertise of new voices from a broader range of disciplines coordinating across national boundaries—and cannot be met by replicating outdated assumptions and methods. In the pages that follow, the study group issues recommendations to the United States and its allies—most directly South Korea and Japan, but also to countries in Europe, Southeast Asia, and Oceania who hold broadly shared objectives even as they prioritize issues of specific national concern.

5. Park and Walsh 2016.

6. In the best of circumstances, in which international inspectors receive complete cooperation from the regime, verified disarmament could take more than a decade. Hecker, Carlin, and Serbin 2018. Even given unrestricted access, it is extremely unlikely that inspectors will ever be able to certify conclusively that North Korea has eliminated all significant quantities of fissile material, delivery vehicles, and production capacity.

The study group asserts that the United States and its allies need a new strategy toward a nuclear-armed North Korea—one that not only actively manages the risks posed by the regime, but will also shape its transformation over time to provide a sustainable foundation for security in the region and the welfare of the North Korean people. Each element of North Korea policy—defense, economic, humanitarian, and diplomatic—should support a clear and realistic theory of how the United States and its allies can shape North Korea’s transformation in ways consistent with regional security, international security, and the human security of North Korea’s people.<sup>7</sup>

On defense, the United States and its allies should work to establish and maintain stability with North Korea. Diplomats should prioritize the negotiation of a threshold agreement, a deal that establishes a minimal acceptable condition of stability and prevents the unlimited expansion of North Korea’s nuclear and missile arsenals or its proliferation to other countries. Subject to the requirements of stability, confronting an evolving threat will require significant adjustments to allied deterrence posture. Nuclear and conventional arms-control and confidence-building mechanisms are critical both to managing stability and sustainably transforming the security relationship. Nuclear disarmament should remain a primary objective of the United States and its allies but now requires a long-term effort to transform the regime and its security environment.

On economic issues, an approach that relies on economic isolation and coercion is unlikely to disarm North Korea and will inhibit efforts to shape the regime’s transformation and mitigate its destabilizing behavior. If a threshold agreement can be reached, the United States and its partners should construct a Transnational Project Management Process to establish mutually agreed standards for evaluating on a case-by-case basis proposals for economic investment ventures in North Korea that shape its transformation in ways consistent with the interests of the United States and its allies and provide incentives to mitigate destabilizing behavior. Sanc-

7. The study group finds that proposals designed to collapse, replace, or forcibly disarm the regime through military or non-military means pose an unacceptable risk of nuclear use, general war, or other catastrophic results. The United States and its allies should be clear that none of the policies below are intended to destabilize or replace the regime, though certain catastrophic failures of the policy should cause decisionmakers to reassess and potentially adjust it.

tions should be calibrated to incentivize positive changes in North Korea's activities, including by enhancing barriers to weapons proliferation and preparing to lift certain classes of restrictions in exchange for specific steps to sustainably transform the security environment on and around the peninsula.

On human security matters, a new strategy should prioritize improvements in the standard of living of the North Korean people and enable them to take a greater role in shaping their society. The United States and its partners should expand their support for a range of initiatives that do not require North Korea's cooperation as a way to pressure the regime to improve its human rights practices. They should also initiate a range of cooperative approaches that encourage improvements in some human rights through economic investment and other activities. Legitimate humanitarian initiatives should be strictly insulated from political pressures, including sanctions, and should be supported unconditionally. The United States and its partners should meet United Nations requirements for humanitarian programs and ensure that they are not legally or practically inhibited by national or international sanctions.

On the diplomatic stage, the United States and its allies should renovate their relations with Pyongyang, with Beijing and Moscow, and with each other in order to improve their ability to manage and transform a nuclear-armed North Korea. The United States and North Korea should establish interest sections in one another's capitals as soon as is practical and maintain them permanently. Educational, cultural, and other interpersonal engagement programs that can educate and empower North Koreans are crucial means of shaping North Korea's evolution and its relationship to the outside world. The United States and its allies should provide financial, logistical, and diplomatic support to these programs and revise their national laws as necessary. Major policy divergences have emerged between Washington, Seoul, and Tokyo and will inhibit efforts to manage and transform the regime if not addressed.

The international community should never accept North Korea as a nuclear-weapon state under the Nonproliferation Treaty. Elimination of its nuclear arsenal should remain a central and guiding objective. However, effective pursuit of this interest now depends on the development and implementation of a realistic plan to transform the regime and its security environment over the coming decades. In short, nuclear disarmament is now a long-term objective. The United States and its allies now need a realistic strategy to indefinitely manage a broad array of risks posed by the regime and to lay a sustainable foundation for regional, international, and human security.

## 2. *An Evolving North Korea*

Under Kim Jong Un, North Korea is undergoing substantial military, economic, and social change. Over the next two decades, these trends have the potential to dramatically alter the challenges and opportunities that North Korea poses for its citizens, its neighbors, and the world.

The state's primary objective is the preservation of the Kim family regime by means of an oppressive system of internal control, economic development, and enhanced legitimacy in foreign affairs.<sup>8</sup> In the first few years of Kim Jong Un's rule (beginning in 2011), the regime advanced these objectives through a range of destabilizing, illegal, and cruel actions: prioritizing military advancements over economic development, raising revenue through illicit activities abroad, degrading and attempting to divide alliances and partnerships that work to constrain it, and committing reprehensible crimes against humanity at home and internationally.<sup>9</sup>

A new strategic line propagated in April 2018 appears to have rebalanced the regime's priorities. In two major speeches in early 2018, Kim Jong Un proclaimed the success of the nuclear-weapon program and declared that "it is the strategic line of the WPK (Workers Party of Korea) to concentrate all efforts ... on the socialist economic construction."<sup>10</sup> At the same time, Kim Jong Un has invested considerable attention in international diplomacy to enhance his standing abroad and alleviate the economic pressure from international sanctions.

Though the outcomes of these developments cannot be predicted with precision, it is critical that the United States and its allies clearly apprehend the rapid changes underway in the security, economic, and humanitarian situations and adjust their strategies accordingly.

8. The Kim regime continues to publicize unification as an aspirational goal to domestic audiences, but it is unlikely that the DPRK can realistically pursue this objective in the medium term through either forcible or diplomatic means.
9. UN General Assembly 2002, vol. A/CONF.183/9.
10. Korean Central News Agency 2018b; Korean Central News Agency 2018a.



SECURITY

Pyongyang seeks to develop its nuclear, missile, and other military capabilities in order to deter against attack or invasion by the United States and its allies; to reinforce the repressive apparatus of the regime; and to use coercion or potentially even violence to degrade and divide alliances and partnerships that seek to constrain or transform it.

Following Kim Jong Un’s assumption of power in 2011, North Korea accelerated its nuclear and missile programs.<sup>11</sup> In July of 2017, the regime tested the Hwasong-14 to demonstrate an intercontinental range capability and four months later tested the Hwasong-15, which credibly demonstrated a capability to deliver even its largest nuclear payloads to ranges covering the entirety of the contiguous United States. Additionally, Pukguksong-2, a solid-fuel, medium-range, mobile land-based variant of the Pukguksong-1 submarine-launched ballistic missile (SLBM), is capable of concealment and rapid launch, improving its survivability. The Korean People’s Army Strategic Force has also invested heavily in demonstrating that its missiles are survivable and capable in operational conditions by expanding production of tracked and wheeled, mobile missile launchers, making modifications to short-range systems designed to improve accuracy, and testing missiles at nighttime, in salvos, and from austere locations. In the study group’s judgment, these demonstrations and others now represent an operational capability to hold targets at risk beyond Northeast Asia.

Though some US intelligence agencies and outside experts no longer doubt that North Korea can miniaturize its warheads or propel them to the US homeland, the regime has not demonstrated its arming, fuzing, and firing system; re-entry technology; or the reliability and accuracy of its systems.<sup>12</sup> It is the judgment of the study group that the United States and its allies must assume that North Korea possesses at least a rudimentary capability to hold each of their territories at risk.<sup>13</sup>

In April 2018, consistent with his earlier claim to have com-

- 11. For an overview, see Kristensen and Norris 2018.
- 12. Warrick, Nakashima, and Fifield 2017.
- 13. Dunford 2017.

DPRK Ballistic Missile Forces  
(by first known test)

<i>Tested</i>	<i>Name</i>	<i>Fuel</i>	<i>Type</i>
1990	Hwasong-7	<i>l</i>	MRBM
2015	Pukguksong-1	<i>s</i>	SLBM
2016	Hwasong-9	<i>l</i>	MRBM
2016	Hwasong-10	<i>l</i>	IRBM
2017	Pukguksong-2	<i>s</i>	SLBM
2017	Hwasong-12	<i>l</i>	IRBM
2017	Hwasong-14	<i>l</i>	ICBM
2017	Hwasong-15	<i>l</i>	ICBM

*s*: solid-fuel, *l*: liquid-fuel

Excludes short range missiles, cruise missiles, and SLVs.

Hwasong-13 mod 1 and Hwasong-13 mod 2, the regime’s first publicly-revealed ICBM designs, have not been flight tested.

SLBM: Submarine Launched Ballistic Missile

MRBM: Medium Range Ballistic Missile (1,000-3,000 km range)

IRBM: Intermediate Range Ballistic Missile (3,000-5,500 km range)

ICBM: Intercontinental Ballistic Missile (5,500 km and greater range)

pleted development of the arsenal, Kim Jong Un announced that tests of intermediate-range ballistic missiles (IRBMs), ICBMs, and nuclear explosives were not “necessary for the DPRK now.”<sup>14</sup> The test moratorium arrived at a critical moment in the arsenal’s advancement, just after demonstration of a rudimentary capability to strike at the US homeland but at a moment that effectively prevents development of new warhead designs for payload optimization and new yield options, as well as the capability, reliability, and accuracy of several new missile designs.

In addition, the negotiation processes begun at Panmunjom and Singapore in 2018 elicited gestures from Pyongyang to disable or dismantle nuclear and missile test infrastructure. However, these actions did not materially degrade North Korea’s ability to manufacture and deploy nuclear warheads, missiles to deliver them, or launchers for those missiles.

In fact, Kim ordered his engineers to “mass-produce nuclear warheads and ballistic missiles.”<sup>15</sup> Even as negotiations were underway in 2018, reports revealed that North Korea continues to produce ICBMs<sup>16</sup> and TELs,<sup>17</sup> expand facilities for production of solid-fuel missiles,<sup>18</sup> and prepares to bring a presumed new experimental light-water reactor (ELWR) online at Yongbyon. Currently, North Korea’s available tritium production can likely support a small arsenal of thermonuclear warheads, but operating the new reactor could expand this quantity significantly.<sup>19</sup>

The study group assesses that given the scale of the nuclear-weapon program and its value for the regime, eliminating North Korea’s nuclear-weapon capability will require that the regime and the security environment around the peninsula transform in significant ways over the course of years, if not decades. The United States and its allies cannot afford to rely on the assumption that a deal will emerge in the near future that will verifiably disclose, access, dismantle, and remove the North Korean arsenal.

Though North Korea’s exact nuclear doctrine is unknown,

14. Korean Central News Agency 2018b. Although Kim announced that IRBM tests are not necessary, he did not include IRBMs in the testing moratorium.
15. Korean Central News Agency 2018a.
16. Nakashima and Warrick 2018b.
17. Panda 2018.
18. Cheng 2018.
19. Chalmers 2016.

its general purpose is to deter attacks that would compromise the regime's internal control by threatening to strike US forces and allies.<sup>20</sup> Through public statements and missile tests, Pyongyang has signaled that it is prepared to order nuclear strikes against US territory, as well as military bases in South Korea and Japan that could support allied forces in a conflict, if it believes military strikes against its territory, military forces, leadership, or nuclear facilities or arsenal are imminent.

Nuclear deterrence requires North Korea maintain a credible survivable retaliatory capability, meaning that a sufficient quantity of its forces could survive an initial counterforce strike and still do unacceptable damage to the United States or its allies. However, the force structure necessary to meet this standard is subject to a complex set of considerations involving allied counterforce capability, allied damage-limitation capability including missile defense, the missions assigned to DPRK nuclear force, their operational and command-and-control procedures, and other issues. Furthermore, North Korea's assessment of these considerations will be inherently subjective, subject to bias and misinformation, and skewed by the overall political and military relationship. It is possible that the DPRK leadership could assess that a credible survivable retaliatory capability can be met with a relatively small number of missiles.

At minimum, North Korea will maintain an arsenal it believes is sufficient to deter invasion. In addition, the regime may believe that specific nuclear assets or a larger arsenal can provide coercive leverage over its neighbors and their allies. If Pyongyang came to believe that new nuclear capabilities could allow it to issue demands that would yield concessions on contested issues or degrade allied military readiness and political cohesion,<sup>21</sup> the regime could choose to invest in further nuclear advancements or issue those threats, creating a highly unstable situation on the peninsula.

Little is known publicly about North Korea's nuclear command-and-control system, a fact that has major implications for crisis stability. Pyongyang asserts that Kim Jong Un has

20. Allard, Duchatel, and Godement 2017.

21. For example, in August 2017, North Korea threatened that it would use its newly acquired Hwasong-12 capability to "envelope" the island of Guam unless the United States stopped bomber flights. Borger 2017.

exclusive authority to order a nuclear strike, but public observers cannot be sure that any physical, procedural, or organizational controls exist to prevent unauthorized use or theft of North Korea's nuclear weapons.<sup>22</sup> The United States and its allies should avoid unintentionally exacerbating flaws in the North Korean NC3 system and work to prevent the regime from adopting dangerous practices like the devolution of launch authority to field commanders or the adoption of procedures or systems to ensure automatic use of these weapons in the event of a perceived attack.<sup>23</sup>

In short, though North Korea's nuclear arsenal is currently limited in critical ways, North Korea may seek to expand, enhance, and diversify its forces in coming decades. Even if the United States and its allies cannot eliminate the North Korean nuclear arsenal, they may have an opportunity to shape and constrain it. Conciliatory actions by the DPRK in the spring and summer of 2018, including a voluntary pause in nuclear and missile tests, may signal a willingness to accept negotiated limits. Though the test moratorium remains voluntary and partial,<sup>24</sup> it is nevertheless a promising signal that Pyongyang is willing to slow the pace of advancements and agree to consequential limits on its activities.

International governments and experts believe that the regime maintains substantial programs to weaponize chemical and biological agents.<sup>25</sup> The Defense Intelligence Agency first reported that North Korea had a "defensive chemical capability" in 1979. Stockpile estimates vary from 2,000 to 5,000 tons of chemical agents. The ROK Ministry of Defense estimates that North Korea has thirteen types of agents that could be weaponized within ten days, and that the regime is most likely to use smallpox or anthrax in a biological attack.<sup>26</sup> Because chemical weapons are less expensive and less complex to develop than nuclear weapons and therefore easier to procure, their original mission may have been to fill a perceived deterrence gap before the regime had a reliable nuclear-weapon capability. Now they likely support Kim Jong Un's asymmetric strategy and act as a conventional force multiplier in North Korean strategic thinking. North Korea's

22. Narang and Panda 2017; Long 2017.

23. Panda 2018.

24. Specifically, KCNA reported Kim Jong Un to have "said that no nuclear test and intermediate-range and inter-continental ballistic rocket test-fire are necessary for the DPRK now." Korean Central News Agency 2018b.

25. Varriale 2018; Kim, Philipp, and Chung 2017.

26. Kim, Philipp, and Chung 2017.

chemical industry also provides an opportunity for the regime to profit from proliferation activities.

North Korea's capacity to execute damaging attacks at conventional and subconventional levels remains a serious concern. In recent years, as North Korea has reached important milestones for its nuclear forces, conventional attacks have declined. Since August 2015, when landmines wounded two South Korean soldiers, North Korea has refrained from conventional attacks. However, the United States and its allies cannot trust that North Korea will moderate its actions at lower levels of conflict now that it has a nuclear-weapon capability. In fact, the converse may well be true if Pyongyang judges its nuclear arsenal can be used to suppress responses to acts of conventional aggression that it considers necessary for reasons of domestic politics, international reputation, or as a means of attaining international objectives.<sup>27</sup>

Though North Korea's regular conventional military forces have declined in strength relative to allied forces, Pyongyang has invested in asymmetric capabilities that could damage military, civilian, and commercial assets on and around the peninsula, including special operations forces, long-range rocket artillery, small submarines, and offensive cyber capabilities, in addition to a variety of increasingly survivable short-range ground-launched missiles.

The security threat posed by North Korea extends far beyond the peninsula. Pyongyang continues to market military goods and services around the world, including technology relevant to ballistic-missile or chemical-weapon programs.<sup>28</sup> Until at least 2007, North Korean agents were also actively proliferating nuclear technology to Syria.<sup>29</sup> North Korea's ability to proliferate nuclear, missile, chemical, or biological weapons around the world not only poses a grave threat to international peace and security, but could also precipitate a crisis on the peninsula that could escalate to conflict.

North Korea poses an increasingly complex and sophisticated cyber threat. The regime's cyber units have attacked targets

27. Snyder 1961; Jervis 1984; Carlin and Jervis 2015.

28. Berger 2015, vol. 84.

29. Plant and Rhode 2013; Kerr, Hildreth, and Nikitin 2016.

in the region and internationally to gather intelligence, disrupt and coerce adversary countries' government agencies, companies, and organizations, steal from financial institutions, and steal commercial intellectual property. Attacks have targeted Sony Pictures, Bangladesh's central bank, and a South Korean nuclear-plant operator, among others.<sup>30</sup> North Korea's activities in cyberspace have continued to advance and evolve, showing little regard for laws, norms, or potential consequences. This trend is likely to continue over the next decades.

30. Jun, LaFoy, and Sohn 2015.

A number of variables will influence the evolution of the security environment on the Korean Peninsula. Most immediately, the outcome of the present round of negotiations will determine whether and how the United States and its allies are able to shape North Korea's arsenal, manage the risks posed by the Kim regime, and promote the transformation of the country. Depending on the specifics and the diplomatic context, negotiated agreements to symbolically or formally end the Korean War could create favorable conditions for future arms control and a transformed security environment on and around the peninsula. On the other hand, a peace declaration could create new opportunities for North Korea to criticize the presence of US forces on the peninsula if it is not handled deftly. A return to the threats and recriminations that prevailed in 2017—or worse, an intentional or unintentional outbreak of military hostilities—would create major and lasting impediments to diplomatic efforts to shape North Korea's military forces and its internal evolution. Such a scenario is likely to accelerate further DPRK nuclear and missile advancements, potentially including new tests. Limits on US and allied military exercises, shifts in US-ROK plans to transfer wartime operational control of combined forces, and shifts in South Korean defense reform plans would create significant challenges for the alliance and its approach to a nuclear-armed North Korea. Close coordination will be required to navigate these challenges.

## ECONOMY

In its economic affairs, Pyongyang seeks centralized control over its domestic economy; economic development to finance military forces and the elite's lifestyle; improvements in the standard of living of its people that reinforce its system of domestic control; and opportunities to increase trade and investment through sanctions relief and bilateral ties.

The North Korean economy is undergoing a dramatic transition. Though the country remains impoverished and the economy burdened by international sanctions and inefficient central control, the spread of licit and illicit markets has revolutionized economic life for many North Koreans.

Starting during the crisis of the 1990s in response to the government's inability to meet the needs of its population, marketization of the North Korean economy has accelerated in recent years, improving productivity, catalyzing social change, and gradually but unevenly improving living standards.<sup>31</sup> One survey describes a vibrant system of markets and estimates that "the number of North Koreans who make a living connected in one way or another to markets is greater than the number who subsist through centrally planned agriculture or functioning state industries."<sup>32</sup> Markets account for an increasing proportion of economic transactions, and the monetization of these transactions has allowed for the emergence of a class of elites that trade in the services, financial lending, consumer goods, transportation, and housing sectors. The regime in turn raises considerable revenue from taxation of market transactions, increasing its own dependence on the market system.<sup>33</sup>

Though the regime initially made several attempts to restrict or persecute citizens engaging in market activity,<sup>34</sup> after 2010, it shifted course and began to co-opt, regulate, and even support domestic markets. This shift has produced a market economy that both profits the state and relies on it. In many cases, state groups have helped to establish markets, accepted private investment for public enterprises, served as registries

31. Lankov 2016.
32. Park 2017.
33. Cha and Collins 2018.
34. Lankov 2009; Haggard and Noland 2010.

or fronts for private businesses, or directly profited from selling food or other goods at market, rather than set, prices.<sup>35</sup>

In order to maintain internal control, the regime has permitted the expansion of markets while maintaining policies intended to control the social and political consequences of marketization. The regime's public communications in 2018 indicate that it is likely to expand its economic development efforts. Yet, ideology, corruption, and mismanagement will continue to impede optimal economic development. North Korea's economic growth has been seriously inhibited by widespread misallocation of resources to the military and the court economy for luxury goods and away from infrastructure modernization, ideological agricultural and punitive policies that cause malnutrition and insecurity, and deliberate efforts to restrict the influence of foreign investors.

The state economy is also changing rapidly. State-owned enterprises have seen advances in productivity as they must now compete for market share, labor, and competent management, necessities that have led to increased autonomy from party control.<sup>36</sup> On the other hand, the public grain distribution system has virtually collapsed and citizens now obtain most of their rice, corn, and other nutrition through the market system.<sup>37</sup> Although reports differ on the extent to which liberalizing agricultural reforms have been implemented, agricultural and manufacturing workers are frequently allowed to sell surplus products on the market, creating incentives to raise productivity even within an inefficient system. Increasing output and improved distribution have led to gradually falling rates of malnutrition.

After years of restrictions on military and nuclear items, sanctions applied in 2016 and 2017 began to cut into general economic activity. As a result of increased enforcement by China and others, external indicators suggest a decline in North Korea's exports. By banning economic engagement with North Korea in an ever-wider range of sectors, United Nations (UN) and other autonomous sanctions have also helped degrade North Korea's international reputation, create broad aversion

35. Park 2017, 26; Lankov et al. 2017.

36. Yang 2018, 101–01.

37. Brown 2018, 10–12.



to economic engagement with North Korea, and limit its foreign relations to a relatively small number of countries.<sup>38</sup> At the same time, enforcement of restrictive measures has been notoriously slow, even for sanctions introduced in 2006, and remains uneven across different jurisdictions and industries.<sup>39</sup> The full extent of DPRK activities to circumvent these sanctions is unknown,<sup>40</sup> but they involve a sophisticated global network of agents to evade sanctions and conduct other illicit activities including cybercrime to generate hard currency for the regime.<sup>41</sup> Amid revived diplomacy in 2018, Beijing began to ease sanctions enforcement in the spring and has upgraded trading infrastructure along its border with North Korea,<sup>42</sup> and Moscow signaled an interest in expanding trade with and lifting sanctions on Pyongyang.<sup>43</sup> Trade with China and Russia is likely to increase in the coming decades.

The evolution of the North Korean economy is contingent on multiple variables. Shifts in the quantity or type of external engagement could alter the shape of its national economy. Increased support from Moscow could provide both opportunities to circumvent international sanctions and decreased political reliance on Beijing. Imposition or relaxation of international sanctions could also affect specific sectors, internal constituencies, or revenue generation overall. Though the agricultural system and economy are more resilient than they were during the 1990s, North Korea's food security outlook remains highly vulnerable to climatic events, a concern that also carries potentially destabilizing political effects.<sup>44</sup> The primary variable that determines the pace and terms of the country's development will be the regime's economic policy: decisions to permit or restrict marketization and agricultural reform, or to strike international agreements that expand access to the global economy will all have major effects.

A continuation of present trends would pose significant risks for allied countries. Though the regime has demonstrated an interest in diversifying its trading partners and achieving sanctions relief, it will prefer to develop the national economy under its strict control. In all likelihood, the regime will cling to inefficient collectivist practices internally that will inhibit

38. Yang and Pearson 2017.
39. Albright et al. 2017.
40. In the first quarter of 2018, China reported that its imports fell 87 percent relative to a year earlier. Reuters 2018.
41. Berger 2017.
42. MacDonald 2018.
43. Ji 2018; Alexander 2018.
44. For example, the FAO warned in July 2017 that "a severe dry spell... has acutely constrained planting activities for the 2017 main season and adversely affected yield potential of the early-planted crops." Food and Agricultural Organization of the United Nations 2017.

growth, the improvement of living standards, and the expansion of personal freedoms that can accompany liberalization. Externally, the regime will rely on illicit and criminal activity to generate revenue and import prohibited goods. If the regime succeeds in these objectives, it will have used marketization to reinforce its externally destabilizing and internally repressive rule. Absent incentives to reform, the military will retain a large and highly distortionary effect on internal and external economic activity. Outside countries must seek to shift these trends and ensure that North Korea's economic development serves the interests of that country's citizens.

### HUMAN SECURITY<sup>45</sup>

The regime's primary concern with respect to its citizens is the maintenance of internal control, which exposes all but the most protected class of citizens in North Korea to routine oppression, privation, and illness. After recovering from the crisis of the 1990s, North Korea has made investments in public health. However, progress has been uneven across geographic and socio-economic divisions and fiscal allocations prove that the regime considers these objectives subsidiary to military ones. In short, the regime in Pyongyang poses a grave threat to the welfare of its own population through inefficient action on humanitarian issues of health and subsistence and through systematic violation of human rights.

Over 2013–14, the United Nations Human Rights Council convened a Commission of Inquiry (COI) to investigate the human rights situation in North Korea. The commission found that “systematic, widespread, and gross human rights violations have been and are being committed,” which, “in many instances... entailed crimes against humanity based on State policies.”<sup>46</sup> The commission found that the state is culpable in maintaining systems that: deny freedom of thought, expression, association, and religion; promote systemic discrimination based on social class and gender; cause and aggravate hunger and malnutrition; and subject to torture, rape and sexual violence, forced abortion and infanticide, enslavement, deliberate starvation, and execution, often arbitrarily.<sup>47</sup> The

45. For the purpose of this report, “human security” refers to a holistic approach that considers threats to people's survival, livelihood, and dignity, as defined in UN General Assembly Resolution 66/290. Human security requires addressing both deprivation and illness classified here as humanitarian challenges as well as threats to the civil and political rights of individuals. United Nations General Assembly 2012.
46. UN Commission of Inquiry on Human Rights in the Democratic People's Republic of Korea 2014, 6.
47. The full findings are available in the UN Commission of Inquiry on Human Rights in the Democratic People's Republic of Korea 2014.

Kim regime's disregard for human security is also reflected in North Korea's international behavior, including state-sponsored abductions,<sup>48</sup> the use of a potent chemical weapon for an assassination in an airport, a crackdown to prevent individuals from leaving the country resulting in a sharp decline in refugees, and a vast network of workers laboring in foreign countries in conditions that essentially amount to slavery.<sup>49</sup>

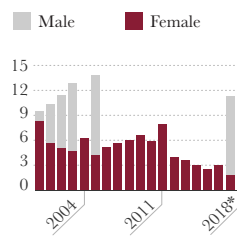
The regime operates two parallel systems of prisons. At detention centers for citizens held in the *kyo-hwa-so* system, there may be a cursory judicial process based on the country's criminal code and conviction on criminal or political charges. At these facilities, prisoners may be starved and tortured to extract forced confessions. Women may be subject to sexual humiliation or violence.<sup>50</sup> Once at the *kyo-hwa-so* camps, prisoners are denied adequate nutrition and access to medicine, and are worked to exhaustion or beaten. Deaths occur frequently. At these facilities, prisoners may be permitted visitors who bring food or medicine, and may have some prospect of eventual release.<sup>51</sup> Officials acknowledge the existence of *kyo-hwa-so* prisons but deny that human rights violations are committed.

In addition, the regime operates the extrajudicial *kwan-li-so* system for political prisoners. Prisoners at those camps are subject to execution, torture, medical experimentation, rape and other sexual violence, starvation, being worked to death, and deliberate cruelty. There is little hope of release. North Korean officials deny the existence of the *kwan-li-so* prison system. Defectors have reported mass burials and killing sites.<sup>52</sup>

Even as most North Korean civilians remain prohibited from accessing information from the outside world, their information environment has changed significantly. From the late 1990s to around 2014, North Koreans gained greater access to televisions, DVD players, and other devices.<sup>53</sup> In recent years, the state has begun to increase its control over digital information by producing cellular phone networks and other personal electronic devices that reinforce government surveillance and censorship.<sup>54</sup> The only sanctioned personal electronics are those built by the regime around two operating systems and a

- 48. Go and Forney 2018.
- 49. Scarlatoiu 2015.
- 50. Human Rights Watch 2018.
- 51. Hawk and Oh 2017.
- 52. Transitional Justice Working Group 2017.
- 53. Kretchun and Kim 2012.
- 54. Kretchun 2017.

North Korean Defectors by Year and Gender



Source: Republic of Korea, Ministry of Unification

\*Provisional data

set of applications that regularly surveil users by taking screen captures, browser histories, lists that track transfers of files between users.<sup>55</sup> Yet, illicit technologies also continue to exist: smuggled USB drives, radio broadcasts from South Korea, and Chinese cell phones near the border provide glimpses of outside perspective.<sup>56</sup> In short, even as new technologies have provided the regime with new ways to surveil and control the population, information technologies also create opportunities to access prohibited information and establish interpersonal networks and identities that are subversive of regime control. The regime is likely to continue attempting to tighten its control on information within its borders.

Beginning during the economic crisis of the 1990s, women have conducted a disproportionate share of the informal market activity in North Korea, affording them new skills, opportunities, and consciousness of their rights. Unfortunately, patriarchal traditions and social stigma have in many cases prevented this activity from translating into improved socio-economic status.<sup>57</sup> Moreover, economic activity has also exposed women to increased violence and sexual violence from government agents, their spouses, and other market participants.<sup>58</sup> Without a course correction, these abuses risk becoming embedded in North Korean society as it evolves.

Although the regime continues to violate human rights and constrain individual freedoms, it has made significant but uneven progress in improving the physical health of the population. Misallocation of resources to the military, geographic disparities, and international sanctions have caused improvements to lag far below their potential, and many citizens suffer daily from hunger, disease, and lack of clean water. Advances are far more pronounced in Pyongyang than rural provinces.

International health agencies estimate that 40 percent of the country is undernourished, a figure that has been steady since 2010.<sup>59</sup> Cereals production has risen gradually since the famine of the mid-1990s, but still has not recovered from that downturn. Production remains about half of the 1993 quantity and roughly equivalent to 1973 figures.<sup>60</sup> Child nutrition in

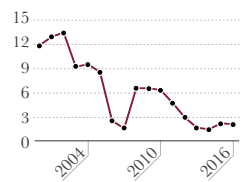
55. Grunow and Schiess 2017; Grunow, Schiess, and Lubetzki 2016.
56. Baek 2017.
57. Park 2011.
58. Human Rights Watch 2018.
59. UN Office for the Coordination of Humanitarian Affairs 2018, 19.
60. FAO 2017a.

Cereals Production in North Korea by Yield (1961-2017)  
(Millions, metric tons)



Source: Food and Agriculture Organization

DPRK Food Production per Capita  
(Thousands, INT\$)



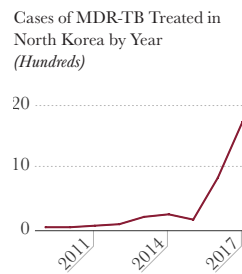
Source: Food and Agriculture Organization

the country has improved since the 1990s, and child mortality rates have fallen significantly since 2000. Though half a million children are stunted,<sup>61</sup> a sign of chronic malnutrition, the percentage of the population that is stunted has fallen rapidly since 2000.<sup>62</sup> Despite improvements, more than a quarter of children under five still suffer from chronic malnutrition and a third are anemic.<sup>63</sup>

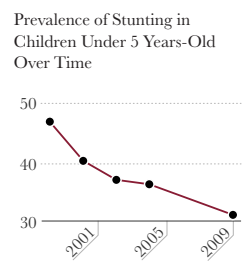
Infectious disease continues to pose a serious risk. In 2016, the World Health Organization estimated that out of 130,000 cases of tuberculosis in the country, 11,000 proved fatal. A dangerous number of these were multi-drug resistant tuberculosis (MDR-TB).<sup>64</sup> In early 2018, the Global Fund, a multinational partnership that served as the largest source of TB treatment programs in the country, withdrew its support, further degrading efforts to control the disease. Experts warn that the country could incubate an outbreak of MDR-TB or another infectious disease that could then spread through the region.<sup>65</sup> North Korea is a co-financing recipient of vaccination support from Gavi, an international organization that improves developing countries' access to vaccines. This program has been successful, with 100 percent of districts achieving at least 80 percent diphtheria-tetanus-pertussis immunization coverage.<sup>66</sup>

International sanctions have exacerbated North Korea's ongoing humanitarian crisis. In addition to the restrictions that North Korea continues to place on the operations of international organizations and humanitarian groups, these groups have also reported serious impediments resulting from sanctions over the last year.<sup>67</sup> Though international sanctions formally include exemptions for humanitarian aid, organizations have faced difficulties with United Nations Security Council Resolution (UNSCR) restrictions on equipment exports, reticence from banks and foreign suppliers to process transactions, and difficulties acquiring waivers from the US government.<sup>68</sup> The United Nations reports that "breakdowns in the supply chain for the delivery of humanitarian goods results in serious delays to operations" and that donors show increased reluctance in funding projects in the country.<sup>69</sup> Overall 2018

- 61. Food and Agriculture Organization of the United Nations 2017b.
- 62. World Health Organization 2015; UNICEF 2017, 100.
- 63. World Food Programme 2018.
- 64. World Health Organization 2015.
- 65. Morrison et al. 2018.
- 66. Gavi 2017.
- 67. Shin 2018.
- 68. Wertz 2018.
- 69. UN Office for the Coordination of Humanitarian Affairs 2018, 8.



Source: World Health Organization



Source: World Bank

funding for the UN humanitarian response plan was just 23% of total requirements.<sup>70</sup> Due to underfunding, since early 2017, the World Food Programme has been forced to reduce rations by two-thirds to its target population of children and pregnant women.<sup>71</sup>

Environmental and political variables could affect the welfare of North Korean citizens over the coming decades. Climatic events that result in drought or flooding could seriously complicate efforts to feed and provide medical care for the population. Changes in the regime’s policies could also have major effects on the welfare of its citizens: removing restrictions on the operations of international aid agencies, prioritizing effective development policies, and appropriating a greater proportion of funds could accelerate advancements in the population’s welfare. Meanwhile, variables that affect the civil and political rights of North Koreans are almost exclusively at the discretion of the regime’s leadership. The regime shows few signs of relenting from committing the crimes against humanity that the COI described. If current trends continue, in two decades North Koreans may see higher standards of living in terms of health and nutrition but lack any commensurate improvement in terms of political rights, legal protection, or access to information.

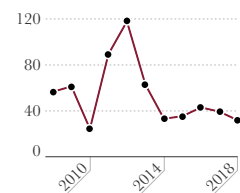
## SUMMARY

There is little indication that the United States and its allies have caused the regime to reassess the destabilizing and repressive methods by which it pursues its objective of autonomy over internal affairs. In fact, in each area of national policy, the regime has had remarkable success in developing new methods to advance its objectives. Even as economic and technological developments have placed new strains on the state’s ability to control and oppress its population, it has found ways to exploit marketization, economic development, and technological advancement to reinforce its own repressive apparatus. At the same time, these changes have resulted in a society that is less atomized and less dependent on the state for survival.

70. Financial Tracking Service 2018.

71. United Nations Secretary-General 2017, 8.

Humanitarian Aid to North Korea By Year  
(Millions, USD)



Source: Financial Tracking Service, 2018

If these trends continue, the next two decades will see North Korea expand its abilities to aggress against the United States and its allies and to fund its activities through internal economic development and illicit external activities. Some North Koreans will see modestly improved living standards and economic opportunities, but few will see relief from state surveillance, censorship, or inhumane repression. For these reasons, the study group finds that the United States and its allies must seek to shape North Korea's evolution so that it meets both their interests and those of the North Korean people.

The trends described in this section invalidate several assumptions that have underwritten the policy of the United States and its allies: that Pyongyang will agree to dismantle its nuclear-weapon production facilities and arsenal in the medium-term; that international sanctions and pressure can compel the regime to disarm; that marketization and economic development will inevitably improve the welfare of the population; that the United States and its allies can afford to neglect the humanitarian and human rights crises inside North Korea; and that US alliances will remain unified and strong.

The United States and its allies remain tied to a strategy toward a North Korea that no longer exists. To account for rapidly changing conditions and to promote a more realistic and more comprehensive set of objectives, the study group finds that the United States and its allies need a new strategy toward North Korea.

### 3. *Objectives & Strategy*

Due to rapid changes in North Korea's military, economy, and humanitarian situation, the objectives that have underwritten the policy of the United States and its allies have become untenable. It is no longer possible to seek to prevent North Korea from developing a deliverable nuclear-weapon capability and it is no longer reasonable to rely on the assumption that Pyongyang will verifiably eliminate its arsenal in the next months and years.

In the judgment of the study group, proposals designed to collapse or replace the regime through military or nonmilitary means pose an unacceptably high risk of nuclear use or other catastrophic consequences. A limited military strike on North Korea carries a minimal probability of permanently eliminating its nuclear-weapon capabilities and carries a high risk of retaliation that could cause unacceptable loss of life in the United States, South Korea, and Japan.<sup>72</sup> As a result, elimination of North Korea's nuclear arsenal should remain a primary objective for the United States and its allies but achieving that objective now requires a long-term effort to transform the North Korean regime and its security environment. The success of an effort to manage and transform a nuclear-armed North Korea requires that the United States and its allies are clear that none of the policies described below are intended to destabilize or replace the regime. Highly destructive or extremely destabilizing DPRK actions should cause the United States and its allies to reassess and potentially adjust its policy.

An unrealistic fixation on rapid disarmament has caused the United States and its partners to neglect other issues of pressing concern, a danger that will only compound over time. If the United States and its partners cannot adapt to new circumstances, policy will drift ineffectually and exacerbate the military, economic, and humanitarian threats posed by the regime. The United States and its allies must develop a new

72. Denmark 2017; Cha 2018; Pak, Terry, and Klingner 2018. A limited strike could result in escalation to a general war of unknown duration; the use of nuclear, biological, chemical, or conventional weapons against civilian, economic, or military targets; refugee flows or famine that would cause untold numbers of deaths of North Koreans and destabilize a region; a risk of inadvertent conflict with China or Russia; severe tensions within US alliances in Asia and elsewhere; a precipitous loss of economic activity due to the war and its consequences; and other unpredictable but potentially catastrophic consequences.



strategy predicated on achievable objectives to manage and transform North Korea.

Specifically, the United States and its allies should work to ensure that North Korea's challenge to regional and international security decreases in the coming years.

A stable regional system requires:

- stability around the peninsula. A permanent risk of war or inadvertent escalation is perilous to the safety and welfare of the region's residents. To the extent that these conditions persist indefinitely, the United States and its allies will fail in their effort to create a stable and prosperous regional order.
- continual advancements in the welfare of North Korean citizens, to include their rights to life, health, bodily integrity, and freedom of thought.

A stable international system requires:

- that North Korea's actions do not further degrade international norms like the nonproliferation regime or controls on financial and trading activities. To this end, North Korea must not:
  - proliferate nuclear, biological, chemical, and ballistic-missile technologies around the world. These actions not only pose a threat to innocent peoples around the world but raise the risk of conflict on the peninsula.
  - undermine the credibility or operations of international political, banking, and trading systems through kinetic or cyber attack.

Achieving a stable regional and international order requires that the United States and its allies actively manage the threats and risks that emanate from Pyongyang. Maintaining multilateral dedication to the issue is critical to prevent future crises from emerging and to reduce the threat that North

Korea's disruptive activity poses to institutions, civilians, and the stability of other regions. This imperative will become increasingly important should the prospect of a disarmament agreement recede in the coming years.

However, it is not sufficient to manage the risks from Pyongyang. Given the possibility of deterrence failure, the difficulty of arresting the regime's illicit activities, and the ongoing humanitarian emergency, the United States and its allies must work to transform North Korea over time. Durable transformation of the regime and its security environment are the only viable means of achieving lasting peace and security, and protecting the rights of the North Korean people.

In pursuit of this outcome, all elements of security, economic, humanitarian, and diplomatic policy should be calibrated to serve a realistic model of North Korea's transformation that can meet the objectives described above. An effective model of transformation must be firmly grounded in the welfare of the North Korean people and be attentive to trends, opportunities, and effects at the micro, meso, and macro levels of North Korean society. At each level, military, economic, and humanitarian policies must be targeted to the regions and groups where they can be most effective.

As North Korea transforms internally, the regime will also have greater incentives to reciprocate efforts to transform the security relationship on and around the peninsula. A North Korea that has a greater stake in economic development and trade will also have greater incentives to avoid causing military instability, be more receptive to arms-control proposals, and be more tolerant of flows of information that cross its borders.

To achieve these objectives, the United States and its allies will have to integrate military, economic, humanitarian, and diplomatic policies far better than they have in past years. Both management and transformation will require that different policy domains not only be consistent with but actively supportive of one another. Policies on economic development

## MODEL OF TRANSFORMATION

For beneficial transformation to occur, North Koreans must be enabled to understand that they deserve a better life, free from privation and repression. At the micro level, improved access to information and basic goods are necessary to spread information about relative deprivation, loosen the grip of regime propaganda, and break down preference falsification.

At the meso level, individuals must gradually develop interpersonal, civil, and economic networks within North Korea and across national boundaries that promote the security and welfare of these groups. The objective is to facilitate the emergence of a class of middle elites dependent on the market economy or income from international trade for their welfare as well as a parallel faction within the regime that is supportive of their interests. This emerging class will only diverge from the regime in circumstances and ways that are in their personal interests, but over time the success of this class could shift the interests of the regime.

At the macro level, the economic success of private entrepreneurs will tend to create demands for policies that permit international trade, a legal process to protect their endeavors, and, increasingly, a healthy workforce that can support more complex economic activity. In order to serve the interests of the North Korean people more broadly, this class of middle elites must be incentivized to pay wages for labor and have an interest in the welfare of their employees.

Decreasing the role of the Korean People's Army in the economy and society will be a critical step in the country's transformation. In addition to freeing capital and resources for economic development, reducing the size of the military and its protected social status could have liberating effects, by freeing both young men for productive economic activity and young women from the economic and sexual oppression they face from military officers.

and human rights should serve this theory of transformation, but it will also be necessary to integrate these efforts with sanctions policy and arms control to shape the regime's economic and social evolution to the greatest extent possible by reducing the role of the military, depriving the regime's propagandists of an external threat, and preventing economic interactions from harming North Korea's population. Diplomatic initiatives should be assessed not only with reference to the results of those initiatives but also their effects on the regime's internal politics, including their ability to create cleavages and factions that further human rights or promote free and responsible economic activity. Lastly, all policies must be scrutinized to limit the risk that they drive the regime toward destabilizing military behavior abroad or a repressive crackdown at home.

Any country attempting to manage North Korea or shape its transformation must do so in full recognition of the severe limits on their ability to affect the country in predictable and beneficial ways. Many aspects of North Korea remain opaque to the world, and the regime will likely continue to resist, suppress, or exploit external efforts to influence its internal politics, economy, or society. Policies should be designed to minimize the risks and harm that could result from the regime reacting to or against those policies. As a result, beneficial transformation of North Korea will be gradual and halting, requiring patience, flexibility, and perseverance.

#### THRESHOLD AGREEMENT

To permit a range of activities and incentives to transform North Korea over time, the United States and its allies should as an initial step seek an agreement designed to establish a minimal acceptable threshold of stability on the Korean peninsula. This should be the immediate objective of negotiations with Pyongyang. Subsequent rounds of negotiations should seek deeper limits on North Korea's ability to threaten and aggress against the United States and its allies and to repress its own people.

An initial threshold agreement should seek to prevent military developments that could lead to increased risk of misinterpretation, accidents, or a precipitous escalation of tensions. In practice, an agreement should impose significant and verifiable limits on North Korea's nuclear and missile arsenals. It should also prohibit destabilizing practices like atmospheric or underground nuclear tests and missile overflights of Japan, which would undermine political support for US and allied concessions. The agreement should be crafted so as to disincentivize other destabilizing practices, like the adoption of dangerous command-and-control practices.

There are a range of potential measures that could verifiably meet these requirements and a minimal acceptable threshold of stability. Some combination of verifiable and sufficiently restrictive limits on fissile-material production, production and deployment of improved missile types or their launch vehicles, and significant reductions in conventional armament could suffice to institute a sustainable condition of stability.

In one example of a potential threshold agreement, the United States and its allies could seek two initial steps in order to materially limit and constrain North Korea's nuclear arsenal. First, building on Kim Jong Un's statements of early 2018, a threshold agreement could define clear prohibitions on nuclear<sup>73</sup> and missile tests above a specific range capability.<sup>74</sup> Second, building on a provision in the 2018 Pyongyang joint summit declaration,<sup>75</sup> the threshold agreement could put in place a plan to verifiably disable North Korean reactors, including the presumed ELWR currently under construction at Yongbyon. Both measures could be verified without on-site inspections and versions of both may have been suggested by Pyongyang.<sup>76</sup> Together, these steps would effectively constrain the regime's ability to support a stockpile of nuclear devices that utilize fusion fuel, inhibit the effectiveness of its re-entry vehicle, and limit the qualitative expansion of the arsenal. In the study group's judgment, these steps would materially reduce the military threat North Korea poses to South Korea, Japan, and the United States and thus reduce the likelihood of nuclear aggression and blackmail.

73. To increase the credibility of this commitment, North Korea should be pressed to sign the Comprehensive Nuclear-Test-Ban Treaty, Partial Nuclear-Test-Ban Treaty, and the Limited Test-Ban Treaty, and to permit an International Monitoring System station on its territory.
74. For example, a Council on Foreign Relations task force suggested prohibiting launch of missiles with a range/payload capacity in excess of the extended-range Scud. Mullen, Nunn, and Mount 2016, 33. Any test restriction should also explicitly apply to satellite launch vehicles.
75. Pyongyang Joint Declaration 2018 included the following provision: "The North expressed its willingness to continue to take additional measures, such as the permanent dismantlement of the nuclear facilities in Yeongbyeon, as the United States takes corresponding measures in accordance with the spirit of the June 12 US-DPRK Joint Statement." Though the scope and methods of dismantlement of Yongbyon have not been articulated or agreed to, the statement should include the presumed ELWR.
76. For more on the value of dismantling the Yongbyon reactors, see Lawrence 2019.

Refraining from proliferating nuclear, chemical, or biological weapons technology is an additional minimum requirement of stability and a threshold agreement should therefore include measures to prevent proliferation. Specifically, a threshold agreement should require a unilateral North Korean commitment to adhere to standards developed by the Nuclear Suppliers Group and the Missile Technology Control Regime.<sup>77</sup> To the extent that Pyongyang takes practical measures to assist the United States and its allies in monitoring its arms transactions to verify that it complies with this commitment, the threshold agreement will be more valuable and should unlock additional concessions.<sup>78</sup>

The United States and its allies should be prepared to offer incentives commensurate with the value of the restrictions implemented. In a minimal threshold agreement, the United States and its allies could offer some combination of adjustments to military exercises, a range of significant confidence-building and transparency measures described below, and relief from select nonmilitary sanctions that comport with efforts to shape the transformation of North Korean society. The threshold agreement can also offer a robust set of declaratory security assurances and a set of steps to enhance their credibility. If a threshold agreement can be reached, it would enable the United States and its allies to initiate a process to allow companies from their countries to engage in economic projects within North Korea provided they meet certain strict standards (as detailed below). The United States and its allies should collectively make a determination about whether any proposed agreement succeeds in meeting the threshold of a minimum acceptable condition of stability.

A range of more restrictive limits on North Korea's nuclear and missile capabilities would provide for a more robust condition of stability. Inclusion of these limits could strengthen a threshold agreement and elicit additional incentives. In any event, future rounds of negotiation should seek increasingly restrictive limits. Low-value activities could include exchanges of information on nuclear strategy, force structure and deployments, nuclear safety procedures; and an unverified shut-

77. Pyongyang should not be offered membership in these organizations nor nuclear-weapon state status under the NPT.

78. A wide range of steps could facilitate verification of nonproliferation commitments, including an agreement to accept monitors or remote monitoring equipment at relevant DPRK facilities or ports, or changes to DPRK operations to facilitate verification by remote sensing.

down of the Yongbyon 5 megawatt reactor. Medium-value activities include verifiable dismantlement of certain North Korean nuclear weapons production facilities or transfer of fissile-material stocks out of the country; removal of launch tubes from the Gorae-class ballistic-missile submarine; a test freeze on new missile-engine development; agreed procedures for development and testing of satellite launch vehicles; provision of additional information on chemical- and biological-weapons programs; and provisions to facilitate overhead verification of strategic forces. High-value activities could include verifiable dismantlement of nuclear, chemical, biological and missile-production facilities, including plutonium reactors or uranium enrichment facilities; declaration and verified disablement of categories of fissile material; dismantlement of certain categories of ballistic missiles, including solid-fuel missiles; and joint programs to redirect scientists and engineers from weapons research.

A more ambitious agreement, whether as part of an initial threshold agreement or in subsequent rounds of negotiation, could permit relief of a wider range of economic sanctions, greater degrees of economic investment, and more robust conventional arms-control arrangements.<sup>79</sup>

If it proves impossible to conclude a threshold agreement, military competition and instability will inhibit economic engagement with North Korea. In this circumstance, the United States and its allies should seek to alleviate instability through modest conventional arms control, including confidence-building and transparency measures, and by promoting expanded diplomatic interaction and humanitarian activities. However, these activities will be limited in scope and less effective in the absence of a threshold agreement.

#### REDEFINING FAILURE

A strategy of managing and transforming a nuclear-armed North Korea is not without risk. In fact, it requires the acknowledgement and careful management of risk. The policy described in this report could fail in four ways: containment

79. Conditions for phased sanctions relief are detailed below.

failure, deterrence failure, failure to transform the regime, or unintended distortion of broader US policy on Asia. Over the years, Pyongyang will apply pressure along each of these fronts. Success will be measured not by forcing the regime into quiescence but rather in preventing the regime from exacting severe harm to the interests of the United States and its allies.

Not all forms of policy failure are equally severe. Policy may fail in minor, major, or catastrophic ways, and the inevitable necessity of adapting and adjusting the proposed policies should clearly distinguish between these types of failures. The top priority should be preventing catastrophic failures of containment and deterrence: the use of nuclear weapons; a general conventional war; and the proliferation of nuclear, chemical, biological, or certain cases of the transfer of ballistic-missile technology. These actions may well require the United States and its allies to abandon a policy designed to manage and transform North Korea as well as many of the specific recommendations below.

North Korea may also attempt measures that would represent major failures of containment and deterrence. Destructive attacks against US, Korean, or Japanese territory or civilians; extremely damaging or costly cyberattacks; an atmospheric test of a nuclear weapon; intensified human rights abuses; continued overflight of Japan with ballistic missiles or damage to Japanese territory caused by a failure of these tests would raise serious questions about the viability of continued restraint and require major adjustments of policy. Likewise, if it becomes clear that continued management of North Korea will lead to military confrontation with China, or, alternatively, an inability of the United States and its allies to resist Chinese hegemony of East Asia, policy would have to shift. Alternatively, if North Korea evolves in a way that solidifies internal repression or fails to advance the welfare of its people, the United States and its allies would have re-evaluate and adjust their strategy.

At the same time, the United States and its allies should rec-



ognize that North Korea will inevitably attempt serious but less destructive transgressions against containment and deterrence. Nonlethal or limited lethality attacks against US and allied forces are unacceptable and should be met with a resolute diplomatic, economic, and, potentially, military response—but if the allies are able to re-establish deterrence, it may not require a wholesale replacement of standing deterrence policy. Likewise, Pyongyang will surely attempt to escape containment of its illicit activity abroad in order to resist constraints; maintaining these restrictions will be a constant challenge.

The policy of preventing North Korea from attaining a credible nuclear-weapon capability failed with the ICBM tests of 2017. As the United States and its allies adopt a new strategy to manage and transform North Korea, they will have to adjust their standards for success and failure. Success will consist of gradual transformation of North Korean society over years and decades, and will most likely be punctuated by a reciprocal series of failures along the way. Given this, the optimal strategy toward North Korea is one that will carry out a coordinated series of military, economic, humanitarian, and diplomatic initiatives to maximize the beneficial transformations of North Korea's society and security environment while minimizing the severity and frequency of moments of failure. It is hardly an inspiring plan, but it is the only realistic one available.

## 4. *Security*

North Korea's acquisition of an ability to strike at the continental United States with nuclear weapons has significant consequences for defense policy. The United States and its allies can no longer afford to trust that they can prevent or eliminate North Korea's nuclear capability but must instead confront the range of threats that North Korea poses to neighboring countries, distant countries, and international security broadly.

Defending South Korea, Japan, the United States, and other allied countries against aggression will require a protracted effort to establish and maintain stability on and around the peninsula. Within this condition of stability and subject to its requirements, the United States and its allies should maintain the capabilities to prevail in any conflict that North Korea could initiate. Yet, deterrence is imperfect. Nuclear and conventional arms-control agreements are indispensable means of imposing and maintaining a stable military balance. Furthermore, a sustained program of military-to-military interaction and confidence-building measures are critical to transforming the security relationship over time to provide more durable grounds for security.<sup>80</sup>

### STABILITY

The guiding principle of US and allied defense planning around the peninsula should be the cultivation and maintenance of a condition of stability, defined as a relationship that will tend to return to the status quo when change is introduced rather than escalate. The terms of this condition of stability should reduce the risk that North Korea perceives itself to be under attack as well as its incentives to rapidly employ nuclear weapons or to operate them in dangerous ways, including devolution of launch authority or instating procedures for automatic use if the regime does perceive itself to be under attack.

80. See, for example, Van Jackson's argument that "deterrence — managing threats by making threats — is not an end in itself but rather a means of buying time. The ultimate success of deterrence derives from whether the time bought was used to ameliorate the conditions that gave rise to the need for deterrence in the first place." Jackson 2018.

Specifically, stability requires an equilibrium of forces that gives North Korea confidence in its ability to deter an unprovoked counterforce strike to eliminate its nuclear arsenal, a decapitation strike against its leadership, or an invasion that would topple the regime but at the same time denies the regime the ability to successfully carry out nuclear coercion or limited conventional attacks against allied territory. For this equilibrium to exist, North Korea must retain confidence that its nuclear capabilities can survive an unprovoked counterforce strike and still inflict significant damage. In other words, in a medium-term future where North Korea retains a nuclear capability, stability requires that North Korea retains confidence in the deterrent value of its nuclear and conventional forces but lacks confidence in their coercive value.<sup>81</sup>

For the United States and its partners, an unlimited North Korean program to expand, enhance, and diversify its nuclear arsenal is incompatible with a condition of stability, as are extremely destabilizing behaviors like atmospheric nuclear tests, or threats of nuclear use for coercive purposes. Unlimited expansion of North Korea's arsenal will require continual deployments of US systems to the region to attempt to re-establish stability or to defend allied territory, making it difficult to conclude and maintain conventional and nuclear arms-control agreements.<sup>82</sup> Atmospheric nuclear tests or repeated nuclear blackmail threats would raise the risk of accidental or deliberate conflict and necessitate a higher alert status of US and allied forces.

For North Korea, stability likely requires confidence in its ability to deter unprovoked attacks that could end the regime's internal autonomy, especially a counterforce strike, a decapitation strike, or invasion. Logically, this requires that Pyongyang assesses that its nuclear forces can survive a conventional first-strike attempt by the United States and its allies and have sufficient remaining forces to penetrate theater and national ballistic-missile-defense systems. To the extent that the United States and its allies continue to publicly refute North Korea's claim of a functional deterrent, the regime will have a strong incentive to publicly demonstrate this capability.<sup>83</sup>

81. Robert Einhorn and Stephen Pifer recommended the allies "reduce the coercive value of the DPRK's missiles through integrated regional missile defense and conventional strike capabilities." Einhorn and Pifer 2017.
82. Importantly, additional US deployments are likely to alarm China and potentially Russia, which means that unlimited DPRK developments would unsettle not only the peninsula but the region more generally.
83. As late as 2018, US officials have continued to downplay the existence of a DPRK deterrent capability. See, for example, Bolton 2018.

The essential difficulty with achieving a condition of stability is that it is an inherently perceptual threshold. Pyongyang operates under a set of assumptions about US and allied counterforce and missile-defense capabilities that will shape its nuclear force posture going forward. There are strong indications that these assumptions overstate US capabilities, which will tend to shrink the equilibrium that satisfies the defense requirements of both sides. Given the wide disparity in conventional and nuclear strength that exists and will continue to exist, a stabilizing equilibrium of forces will necessarily be asymmetric. This asymmetry, combined with the regime's assumptions about allied capabilities and mutual distrust, will make it extremely challenging to identify an equilibrium of forces acceptable to both North Korea and the United States and its allies.

Arms control is a critical means of establishing and maintaining a continually shifting equilibrium of military forces.<sup>84</sup> Successful arms-control agreements not only shape opposing force postures to control destabilizing systems but also constitute a bargaining process by which stability is defined, created, accepted, and maintained through verification. Both aspects of arms control will be critical to preventing war on the Korean peninsula.

The initial step toward stability is to conclude a threshold agreement that limits the size and diversity of the DPRK nuclear arsenal, to restrict its coercive value, and to reduce the risk of nuclear accidents.<sup>85</sup> Specifically, this initial agreement should prohibit or disincentivize destabilizing practices like test overflights of Japan; underground or atmospheric nuclear tests; development of multiple-warhead payloads, sophisticated penetration aids, low-yield and tactical nuclear explosives or nuclear air defenses; development, testing, or employment of additional solid-fuel missiles; or adoption of dangerous command-and-control practices like predelegation of launch authority to field commanders or announcement of automatic procedures to issue retaliatory nuclear employments. Failure to forestall these potential developments would create serious strains on deterrence and regional stability. A small and rudi-

84. Warden and Panda 2019 further develops concepts raised as part of the study group's deliberations.

85. Standards for and terms of a threshold agreement are explained in detail above.

mentary arsenal that is structured for retaliation is far preferable to a large, diverse, and highly capable arsenal. A threshold agreement to cap North Korea's nuclear and missile arsenals is critical for establishing a minimum condition of stability.

A threshold agreement is a critical component of a stable military equilibrium and can support the practice of deterrence but will be insufficient to maintain stability over time without a sustained program of arms control and confidence building. This is true for three reasons: first, the high concentration of conventional forces around the peninsula also poses significant risks to stability; second, military technology and deployments around the peninsula will evolve over time, requiring ongoing attempts to adjust and preserve a condition of stability; third, deterrence is an imperfect instrument and can fail. The persistence of distrust, misunderstanding, and a circumstance in which Pyongyang has little ability to detect an incoming attack creates serious risks of misperception and miscalculation.<sup>86</sup> In short, the United States and its allies must work to not only manage a perilous security environment on the peninsula; they also must work to transform the security relationship over time into one marked by improved transparency and mutual confidence in the defensive intentions of the opposing side.

To transform the security environment on the peninsula, the United States and South Korea should engage North Korea in an ongoing program of military interaction and communication, arms control, and confidence building.

Though the United States and South Korea have repeatedly attempted conventional arms control since the Korean War, North Korea's nuclear capability and promising early steps from North-South talks make those efforts both more important and more likely than they were in previous decades.<sup>87</sup> Conventional arms control should seek to improve transparency about capabilities and intentions, limit capabilities useful for subconventional aggression, create a firebreak in North Korea's force structure that could prevent possible low-level events from escalating unimpeded to the nuclear level, and

86. Jervis and Rapp-Hooper 2018.

87. For an overview of previous efforts and earlier manifestations of some recommendations below, see Nautilus-CSIS Working Group 2002.

decrease the severity of any conflict. Exchanging information about force structure and doctrine would be a useful first step in improving transparency. For example, the two sides could list and disclose a complete order of battle including the equipment assigned to each unit. North Korea should also be encouraged to submit a defense white paper to the Association of Southeast Asian Nations Regional Forum that articulates its nuclear doctrine and broader security strategy in accordance with that institution's established practice.<sup>88</sup> The study group recommends that the United States and its allies seek steps to address long-range artillery, reduce the size of North Korea's conventional forces, improve transparency, alleviate tensions, and resolve the territorial dispute in the Yellow Sea.<sup>89</sup>

The central importance of stability means that the United States and its allies have an incentive to demonstrate that their capabilities on and around the peninsula meet reasonable and minimal North Korean requirements for stability—specifically, the ability of their arsenal to survive a first strike. To this end, the parties should agree to issue security assurances not to exceed force levels that both sides accept as conducive to stability and to increase the credibility of these assurances by declaring the capabilities of existing forces, supported by verification. An exchange of military observers to inspect selected weapons systems to verify their stated capabilities, for example the non-nuclear status of the B-1B bomber and fighter aircraft assigned to peninsular exercises, could improve trust and transparency.

Given the importance of exercises and military tests, an early priority of arms control should be to improve transparency around both sides' exercises and modify them to decrease the stability risks they generate. Both sides should issue notifications in advance of exercises and tests that clearly describe the planned activities in order to decrease the risks of misperception. In addition to a moratorium on missile tests, North Korea should agree to scale down its winter military exercises and artillery drills. In exchange, the United States and South Korea can permanently institutionalize modifications to joint

88. ASEAN Regional Forum 2007.

89. A negotiated withdrawal of 240-mm multiple rocket launcher and 170-mm Koksan artillery to a point 60 kilometers from the Demilitarized Zone (DMZ) could improve stability by limiting the incentives for the combined US-ROK forces to strike early in a crisis and could allow the alliance to relax the readiness of certain units. An agreement could also prevent North Korea from opening the Yonbong-ni hovercraft base near the Northern Limit Line (NLL) and confine amphibious forces to the northern bases Kibong-dong and Tasa-ri. Bermudez 2018. Eventually, conventional arms control should seek to reduce the size of North Korea's regular forces, which could be useful from a security perspective but could be even more consequential in its potential to demilitarize the country's economy and transform society in beneficial ways. To avoid miscommunication and miscalculations, the United States, South Korea, and North Korea should undertake routine military-to-military dialogues to discuss issues as they emerge. Though the inter-Korean process has led to significant developments on military-military communications, the United States has not yet made comparable efforts. The North and South should also engage in efforts to reduce tension in the Yellow Sea by clarifying fishing rights and working toward an agreed resolution to the border dispute. Draudt and Warden 2017.

exercises begun in 2018, to ensure that they are predictable, stabilizing, and consistent with a high standard of military readiness. Large annual exercises can be disaggregated into more regular joint exercises at the division level and below, and air and naval exercises can be held over the horizon. The United States and South Korea should permanently halt bomber assurance missions, which are unnecessary for deterrence credibility.<sup>90</sup> Bomber assurance exercises with Japan should not take place over the Sea of Japan. Tabletop, decision making, and simulation and other digital exercises can be separated from live-fire exercises and should occur with little publicity.<sup>91</sup> Where it would not pose a risk to allied forces, the US-ROK alliance and North Korea should exchange observers for military exercises as well as operations at potential points of conflict, including the DMZ and NLL. Observers can visit military installations to verify defensive intent and certify regular operations of conventional forces.

90. Jackson 2016.

91. Wit and McKinney 2017; O'Hanlon 2018.

Rigorous and consistent verification of conventional and nuclear arms control can improve the credibility of security assurances by certifying that opposing forces adhere to limits conducive to stability. The exchange of personnel affords an additional layer of confidence. Pyongyang is less likely to believe they are under attack if they receive regular reports from their observers in addition to having American and South Korean military and diplomatic personnel present on their territory. Over time, the accumulation of successful inspections can allow the parties to implement deeper armament reductions.

## DETERRENCE

Transparency and arms control are insufficient to maintain stability on the peninsula; the United States and its allies must also resolutely and sustainably deter an evolving set of military threats from North Korea. To preserve stability and avoid creating unnecessary escalation risks, the United States and its allies will have to account for the effects of their acquisitions and force posture on North Korea's threat perception, early warning, and second-strike capabilities. If Pyongyang is

willing to limit its forces, allied forces should adhere to agreed limits conducive to a stabilizing military balance like the ones described above.

In support of a condition of stability and subject to its requirements, the United States and its allies should maintain the capability to prevail over any potential DPRK attack at any level of escalation. Consistent with measures to establish stability and an ongoing program of arms control, the United States and its allies should invest as necessary in additional defensive forces, posture these forces in ways consistent with their defensive role, and where possible given operational security and reciprocal steps from North Korea, offer them for observation.

To maintain their ability to prevail in potential conflicts, the alliances should continually adjust their force postures. Even as Pyongyang crosses the nuclear threshold, it has expanded its options for aggressing against allied forces at low levels of escalation, including at sea, in cyberspace, and with special operations forces. The United States, South Korea, and Japan should develop and deploy additional capabilities to defend against these threats. Antisubmarine, surface, subsurface, and aerial forces should deny Pyongyang the capability to strike civilian or military ships. US and ROK special operations forces should prepare to defend against amphibious and land incursions designed to sabotage, surveil, disrupt operations, assassinate, or seize territory. The combined forces should also ensure that they retain sufficient aerial and counter-battery fires to hold at risk North Korea's expanding multiple rocket-launch and tube artillery forces. All three partners should develop a robust and coordinated program for cyber defense and cyber resiliency that protects military, governmental, infrastructure, and civilian systems from intrusion and attack—capabilities that are currently badly lacking. Theater missile-defense systems should defend critical military and political facilities from small salvos of DPRK missiles, but an attempt to provide complete coverage against all DPRK missiles will prove impractical and costly. In the judgment of the study group, the United States and its allies



currently lack this capability and should supplement existing theater missile-defense systems on the peninsula and in Japan. Lastly, the United States, South Korea, Japan must improve their resiliency to limited nuclear employment by hardening, diversifying, and dispersing critical military forces to ensure that they can continue to operate in the event of a limited attack. The US-ROK alliance should consider development of additional ports and airstrips to ensure US forces access to defend the peninsula in a crisis and to decrease North Korea's incentives to strike a small number of critical sites early in a conflict.<sup>92</sup>

92. Jackson 2015.

93. Hackett 2018.

Serious difficulties have also emerged within the US-ROK alliance with respect to counter-provocation planning and deterrence posture. Divergences in how the two militaries plan to respond to provocations have not been redressed, raising the difficulty of ordering a combined response in a crisis and raising the risks of unintended escalation. During 2017, public signaling that the alliance was preparing to conduct a decapitation strike during a crisis with aerial, standoff strike, and special operations forces had become commonplace, but these actions are destabilizing and should cease. ROK efforts to duplicate US capabilities like battlespace management assets and submarines may be redundant and unnecessary, while efforts to supplement surveillance and reconnaissance efforts have been too slow.<sup>93</sup> In the coming years, the United States and South Korea should systematically reassess existing military planning to account for new DPRK capabilities and ensure agreement on combined defensive and counterprovocation plans.

The practice of extended deterrence in the US-ROK and US-Japan alliances must adapt to account for North Korea's new nuclear capability as well as the proposed modifications to exercises and force structure. Both alliances should eschew inflammatory public displays of nuclear-capable assets and should redirect efforts to improve joint planning. Existing bilateral extended-deterrence mechanisms have proven insufficient to address the need for frank and detailed combined scenario planning. The United States, South Korea, and Japan should

create a trilateral mechanism to coordinate crisis management and joint planning and should look to integrate battlespace management systems. Because the most effective response to DPRK nuclear employment may not be a reciprocal US nuclear response, the three partners must develop detailed, combined plans for optimal responses in specific scenarios of nuclear use. Furthermore, South Korean and Japanese officials should not depend on prominent signals of nuclear assurance, but instead recognize US presence and regular combined operations as strong signals of alliance credibility. Government officials, parliamentarians, and public analysts have an obligation to explicitly reject proposals for an independent ROK or Japanese nuclear capability, which is contrary to their international legal obligations and, in the study group's judgment, would seriously damage the security of either country, regional stability, and their alliances with the United States.<sup>94</sup>

North Korea's ability to disrupt military planning, economic institutions, and nongovernmental organizations (NGOs) has been underappreciated and has been exacerbated by poor coordination between the United States, South Korea, and Japan. Defending against DPRK cyber intrusions is necessary both to maintain a strong defense and to preserve stability. To improve regional coordination, Washington, Seoul, and Tokyo should create a standing group designed to share intelligence on cyber threats and develop improved defensive capabilities that emulates and interfaces with the NATO Cyber Security Center of Excellence.

The role of North Korea's chemical and biological arsenals is poorly understood and frequently overlooked. It is unknown but widely assessed that Pyongyang would contemplate their use to deny access to its territory or attempt to disable adversary military installations or metropolitan areas in a crisis, or to terrorize US allies in peacetime; they could also potentially be sold to external buyers. The United States, South Korea, and Japan should undertake a high priority planning process to develop agreed mutual assistance plans in the event of chemical- or biological-weapon use in addition to coordinated military options to deter and to respond to their use.

Regional and international security also requires that North Korea not incubate or spread contagious disease or generate large flows of refugees that could destabilize the region. In this regard, humanitarian and economic policies are critical to national security, not just to transform North Korea over time, but to directly manage these threats by preventing their emergence.

## NONPROLIFERATION

North Korea continues to be one of the world's most active weapon proliferators, including technology related to nuclear and chemical weapons.<sup>95</sup> It has also been the largest provider of ballistic-missile-related goods and services to the developing world, and continues its efforts to sell these products to customers in the Middle East, Southeast Asia, and likely Africa.<sup>96</sup> In addition, Pyongyang exports a range of conventional weapons-related goods and services worldwide, sales which help support organizations central to North Korea's domestic WMD and missile programs.<sup>97</sup> North Korea is increasingly seeking to leverage its evasive tactics in order to access the global commercial defense and security market.<sup>98</sup>

Containing North Korea's proliferation of WMD and missile technology should be a core objective of the United States and its allies. Policy toward this issue should not only reduce supply- and demand-side incentives for DPRK weapons transfers, but also enhance alliance capabilities to prevent supply from meeting demand in the event that other efforts fail to dissuade North Korea and its customers.

### *Supply-side policies*

The country's apparent desire to seek international legitimacy may provide opportunities to press Pyongyang to cease its export of WMD- and missile-related technology, if the United States and its partners can credibly demonstrate that there is a concrete, negative relationship between its legitimacy and its proliferation activities. To strengthen this position, the United States and its partners should ensure that the arms

95. Office of the Secretary of Defense 2018.

96. UN Panel of Experts 2018.

97. Berger 2015.

98. Berger and Cotton 2018.

embargo introduced by the UN Security Council (UNSC) in 2006 remains in place until Pyongyang ceases its proliferation of WMD- and delivery vehicle-related goods and services.<sup>99</sup>

However, an effective effort to prevent Pyongyang’s proliferation activities should begin from the recognition that they represent a substantial source of income for the regime. Its “military economy”—the share of economic output devoted to defense research, development, and production—is believed to be between 13-22 percent of gross domestic product.<sup>100</sup> If North Korea commits to refrain from defined forms of weapons proliferation under the threshold agreement and abides by this commitment for five years, the United States and its partners should ensure that the legitimate revenue the regime gains from sanctions relief and economic projects outweighs lost revenue from weapons exports.

The United States and its allies should help incentivize these changes and, as part of its theory of transformation, incentivize DPRK entities previously involved in proliferation to move away from weapons-related business and toward more legitimate activity. The international community may therefore need to be prepared to remove relevant companies and individuals from sanctions lists if they can demonstrate that their activities are non-military in nature.<sup>101</sup>

#### *Demand-side policies*

The United States and its allies should also continue assertive, coordinated efforts to pressure North Korea’s military customers to sever their contracts with North Korean suppliers. Demand-side policies should target both North Korea’s suspected missile customers and its buyers of lower-level conventional weapons, as Pyongyang has had repeated success in enticing its conventional-weapons customers into larger and more profitable military sales, including missile-related technology.<sup>102</sup>

The United States and its allies should also coordinate with other relevant defense suppliers to provide a cost-effective al-

99. Ibid.

100. US Department of State 2017.

101. These measures are defined in greater detail in the sanctions section below.

102. Berger 2015, vol. 84.

ternative for countries that might consider DPRK products. These efforts should be backed by credible threats to impose costs on customers in the form of autonomous sanctions, retractions of aid or other forms of assistance, or denial of other bilateral or multilateral benefits, if they do not change course.<sup>103</sup>

### *Cross-cutting improvements*

While pursuing the above policies, allies must maintain a robust set of capabilities to respond to scenarios where North Korea and its customers remain determined to proceed with a transaction of concern. Interdictions, particularly in the context of the Proliferation Security Initiative (PSI), have been and will continue to be critical to preventing supply from meeting demand. However, while participation in the PSI has grown since its establishment in 2003, political difficulties have decreased the initiative's ability to adapt to appropriately respond to contemporary proliferation threats.

The United States and its partners should therefore push to augment PSI cooperation with a more specific, multination Memorandum of Understanding with countries operating open shipping registries (or so-called "flags of convenience"), whose consent is required for certain interdictions. It would specifically allow for expedited boarding of vessels in cases where they are suspected of carrying weapon-related goods to or from North Korea, and would specify procedures for boarding authorization, information sharing, and the reimbursement of any associated costs. The agreement would be rooted in the legal authorities provided under UN Security Council Resolution 2397<sup>104</sup> and would draw upon NATO's experience in counterpiracy operations. These agreements could adopt the model of NATO Operation Ocean Shield, permitting partner countries to take action in territories along traditional DPRK proliferation pathways to allow for action to be taken in areas under their jurisdiction.<sup>105</sup>

Because North Korea's ability to proliferate dangerous military technology depends on gaps in information sharing,

103. The study group notes that comparable recent efforts to compel Egypt (Associated Press 2017) and Sudan (Reuters 2018) to discontinue their military relationships with North Korea have resulted in public pledges to forswear future cooperation, though continued scrutiny is necessary to see that these promises are fulfilled.
104. United Nations Security Council 2017, para 9.
105. NATO 2009. For more on NATO involvement in maritime interdiction and nonproliferation, see Connolly 2018.

enhanced intelligence sharing between partners will be imperative for the foreseeable future, whether for monitoring the impact of supply- and demand-side policies or supporting interdiction and trade control initiatives. Partner countries should establish a multilateral “situation center” that collects and disseminates relevant open-source or declassified information among partners, including the UN Panel of Experts.<sup>106</sup> In particular, the United States, South Korea, and Japan should prioritize trilateral information-sharing mechanisms to better address DPRK proliferation of military technology.

### NUCLEAR DISARMAMENT AS A LONG-TERM OBJECTIVE

Even as they prepare to manage and transform a nuclear-armed North Korea, the United States and its allies should retain nuclear disarmament as a central and guiding objective. A nuclear-weapon-free peninsula now depends on the development and implementation of a plan to steadily transform the regime and its security environment to incentivize a decision to verifiably eliminate its nuclear arsenal. Because that decision is potentially decades in the future, a long-term disarmament plan must comport with a theory of transformation and allied defense policies.

The policies described above to establish and maintain stability and promote regular military interactions to improve transparency, are intended not only to preserve peace but to create the conditions for eventual disarmament. Policies described below that give North Korea a greater stake in economic interaction and development can also drive the regime toward an eventual decision to disarm. North Korea will be more likely to make a decision to disarm if its arsenal is rudimentary, limited, and tacitly acknowledged by the United States than if it has continually invested in expanding and improving its arsenal to prove a second-strike capability. Beginning with a threshold agreement, successive rounds of negotiations should aim to expand and deepen a condition of stability, establishing progressively more restrictive limits on the arsenal’s size and diversity. Disarmament is more likely after a protracted pattern of successful arms-control agreements and allied

106. Part of the situation center’s work should also involve tracking DPRK technical personnel overseas, including individuals involved in commercial activity of concern, academics, students, and engineers. Maintaining up-to-date information on relevant DPRK nationals abroad is important not only for day-to-day counter-proliferation activities, but also to facilitate a rapid response in the event that the DPRK regime destabilizes and the nature of the proliferation threat from DPRK technical personnel overseas changes.

restraint, economic interaction, and transition of the DPRK economy to a development footing than it is if the following decades continue to be marked by isolation and antagonism.

In the study group's judgment, an approach aimed exclusively at disarmament that begins with a unilateral disclosure or down payment remains implausible for the foreseeable future. Instead, a piecemeal approach to nuclear arms control that progressively lowers established caps on North Korea's nuclear arsenal is likely to have salutary military consequences sooner and be a more effective means of achieving disarmament over the long run.

## 5. *Economic Policy*

Economic isolation and coercion failed to prevent North Korea from developing the capability to strike its neighbors and the continental United States with nuclear weapons. Now that Pyongyang has crossed this threshold, the interests of the United States and its partners consist in containing the regime's illegal and illicit activity around the world, as well as promoting a model of development for the country consistent with its citizens' welfare and the stability of Northeast Asia.

The study group judges that an economic policy that manages the threats the regime poses to international stability and promotes its transformation is likely to be the most effective means of advancing the interests of the United States and its allies. The sanctions regime should be adapted to maximize the ability to induce positive changes in Pyongyang's behavior short of complete disarmament, while preserving and enhancing barriers to proliferation-related trade and unconditionally permitting all humanitarian activities. With the signature of a threshold agreement, the United States and its allies should create a multilateral framework to facilitate direct economic engagement with North Korea that advances a realistic theory of regime transformation and upholds other allied objectives. This Transnational Project Management Process should assess, authorize, and administer projects proposed by private firms in accordance with agreed standards to ensure they promote the personal welfare and freedoms of North Koreans and prohibit those projects that carry proliferation risks, support systems of repression, or could be redirected to support the military or leadership's purchase of luxuries.

Continuing economic isolation and coercion to the detriment of management and transformative objectives will only allow North Korea to develop on its own terms, prioritizing military expenditures, deepening its repression of its citizens, and expanding its access to global markets through illicit means or with the assistance of partners willing to ignore the rules-based international order.



## RECALIBRATING THE SANCTIONS REGIME

Both UN and autonomous sanctions programs should be modified to adapt to a new strategy to manage and transform North Korea. The overall objective of sanctions should be reoriented toward more realistic outcomes than “complete, verifiable and irreversible denuclearization,” the goal that is enshrined within existing resolutions. The focus on disarmament has produced a damaging narrative that sanctions are useless in the DPRK context,<sup>107</sup> a perception that has undermined efforts to promote global implementation of the sanctions in place.<sup>108</sup>

The study group finds that the insistence of the United States and its allies that no sanctions will be lifted prior to verified nuclear disarmament<sup>109</sup> represents a significant constraint on the international community’s leverage over Pyongyang’s behavior and an impediment to achieving immediate priorities. The United States and its partners should agree among themselves that disarmament should be set aside as the proximate goal of sanctions pressure. Instead, the medium-term objectives of UN and autonomous restrictions should be: negotiation of a threshold agreement to establish stability on the peninsula and subsequent additional measures to restrain North Korea’s WMD and missile programs through arms-control and transparency agreements; cessation of the prohibited sale of military technologies to overseas customers, routine criminal activity in cyberspace, and other activities that are damaging to international norms of responsible conduct. Beyond a threshold agreement, the sanctions regime should be recalibrated to serve a realistic theory of transformation for North Korean society by cultivating a North Korean middle that is less reliant on the military for its economic subsistence. Even if sanctions cannot achieve disarmament as an immediate objective, they can advance disarmament as a long-term objective by helping to shape the society’s transformation and deter behavior that can lead to tensions and instability.

To both manage and transform North Korea in the interest of international stability, the United States and its allies should

107. Hudson and Francis 2016.

108. Albright et al. 2017.

109. Pompeo 2018.

adapt the sanctions regime to create greater space for economic engagement projects that facilitate a clear theory of transformation while tightening constraints on Pyongyang's ability to sell military goods and services overseas.

As part of negotiations, the United States and its allies should be willing to offer incremental sanctions relief in exchange for corresponding and sustained improvements in North Korean behavior on security issues, its transnational activities, and human rights issues. The lifting of sanctions can proceed in four broad phases and should concentrate predominately on lifting those restrictions that were part of the economic embargo constructed since 2016 while leaving in place the targeted military restrictions applied prior to 2016. Provided Pyongyang has demonstrated sustained behavioral change sufficient to justify the incentive, the United States and its allies should consider:

1. Facilitating exemptions to UN and autonomous sanctions without changing the underlying sanctions authorities. In the case of cooperative economic projects described below, exemptions should be time-limited and renewable rather than indefinite to create an opportunity to terminate the project if DPRK behavior worsens.
2. Adjusting to the severity of individual measures. For example, relaxing the ban on joint ventures and cooperative entities to allow for such partnerships in but not outside of North Korea, creating space for structured investment activity. In other areas, wholesale bans on trade in prohibited commodities can be reverted (in the case of coal) or converted to defined, quantifiable caps.<sup>110</sup>
3. Lifting complete provisions within the framework of allied objectives. Candidate provisions include UN prohibitions on cooperative entities or on financing of investment activities, which could allow for controlled but more expansive economic projects inside North Korea. The ban on DPRK textile exports, or

110. In the case where caps are applied, the regime might be expected to implement measures that improve transparency and facilitate verification of adherence to the caps. To take one example, the imposition of caps could also be contingent on a revision of relevant business practices, including the way it organizes particular corporate structures or financing arrangements.

restrictions on certain energy, metals, and machinery imports, could also be rescinded with relatively little risk to counterproliferation or other objectives.

4. Lifting whole categories of sanctions, such as sectoral measures on commodities like coal or iron ore, or sanctions against North Korea's shipping sector.

Sanctions relief should be aligned to clear and specific baselines of North Korean actions. Relief should be contingent on explicit agreement between the United States and its partners and, as necessary, Russia and China, to reimpose the sanctions in question in the event of specific actions that violate agreements. Any sanctions relief should be contingent on verified compliance with a threshold agreement. Moreover, relief in categories three and four should occur only after North Korea has taken substantial, verified, and sustained actions to sustainably transform the security environment on and around the peninsula.

The following sanctions should not be on the table for negotiations:

- Measures targeting technologies for the production or operation of weapons of mass destruction, ballistic missiles, and dual-use items. These should remain in place as long as North Korea retains these capabilities.
- Measures targeting North Korea's continuing and concerning proliferation and procurement of conventional military technology. The UN arms embargo should remain in place until North Korea has acted in compliance with its requirements for five years. After this time, the United States and its allies should explore suspending the embargo, subject to an agreement that defines categories and quantities of permitted sales and institutes transparency procedures to assist with verification. After five additional years of compliance, the embargo may be lifted. In the absence of positive changes to North Korean prolifer-

ation activity, the United States and its allies should step up their efforts to use autonomous sanctions to impose costs on those who purchase or sell relevant goods or services from Pyongyang.<sup>111</sup>

- Measures targeting industries in which the North Korean military complex has a controlling stake, including certain sectoral sanctions.<sup>112</sup>
- Measures targeting senior North Korean leadership, including relevant travel bans, asset freezes, and luxury-goods sanctions. These mechanisms are vital to preventing party officials from becoming the exclusive beneficiaries of any improvement in DPRK relations with the global economy. The United States and its allies should push for more regular opportunities at the United Nations to update relevant lists, and should actively update their own designations even in times of dialogue with Pyongyang. At the same time, the United States and its allies should avoid targeting middle elites with sanctions and instead make them a focus of exchanges or economic interaction.
- Measures targeting officials engaged in human rights abuses or organized criminal activities, including involvement in coordinated cyber theft. Sanctions on relevant individuals and entities engaged in either activity should be considered distinct from those that were applied in response to DPRK weapons programs and should be adjusted only in the event of improvements in the regime's treatment of the population. Additional sanctions in these categories should be applied as more information emerges. However, UN sanctions curbing North Korea's practice of sending laborers overseas—the only international sanction with a human rights element to it—could be the subject of future negotiations to bring the practice in line with International Labor Organization (ILO) standards.

111. Five-year waiting periods are necessary to demonstrate compliance with UN resolutions and to reinforce their authority, to dismantle the clandestine network used to proliferate weapons that threaten international stability like ballistic missiles and WMD, and to begin to transition the DPRK away from reliance on prohibited weapons sales to generate currency. At the same time, they should be short enough that Pyongyang can recognize a clear incentive to comply.

112. These interests may change as North Korea's economy and the players behind it evolve in the medium-term; sanctions will need to be attentive to any shifts. The intention of this restriction is not to target industries that employ some lower-ranking military service members but rather those wholly operated by the military with the intention of raising revenue or foreign currency.

Given that restrictions cover a wide array of trade and financial activities, even authorized engagement efforts will face

additional barriers. The intertwining of numerous policy objectives—including nonproliferation, human rights, counterterrorism and anti-money laundering—also poses challenges for efforts to unwind or alter existing restrictive measures. Sanctions on North Korea’s practice of sending migrant laborers overseas, which seek not only to address a human rights concern but also the revenue streams generated from this service industry, is one example of these overlapping sanctions justifications.

113. Albright et al. 2017.

In any event, North Korea should be expected to exploit any international trade and finance connectivity that it does enjoy to facilitate UN Security Council-prohibited procurement and sales. Implementation of the measures that remain in place will be critical to the success of any revised sanctions strategy. Enforcement of restrictive measures has been notoriously slow, even for sanctions introduced in 2006, and remains uneven across different jurisdictions and industries.<sup>113</sup> Although political interest in sanctions implementation was revitalized during 2017 in many parts of the world—including in China—sustained improvements in implementation will require robust plans to provide technical assistance and to maintain political will. The United States and its partners should continue to fund and coordinate multilateral technical assistance programs of the variety initiated in 2017 and demonstrate their resolve in enforcing serious cases of noncompliance with unilateral designations or other penalties. They must also actively share information with UN investigators to better facilitate their work and insist that other countries do the same.

#### PROTECTING HUMANITARIAN ACTIVITIES

In 2018, humanitarian aid organizations working in North Korea reported a variety of impediments to their work resulting from US and international sanctions. Though the sanctions include explicit carve-outs for humanitarian work, companies that aid organizations depend on are ignorant of their existence or scope, or are too risk averse to assist with legitimate transactions or purchases. Several humanitarian organizations have been forced to curtail their operations in North Korea due to

the operational difficulties of moving materials and funding into the country.<sup>114</sup> In the judgment of the study group, obstructions to humanitarian work are not only morally unacceptable but also practically counterproductive to the interests of the United States and its allies. Part of ensuring that humanitarian aid is strictly insulated from other aspects of policy<sup>115</sup> is ensuring that attempts to pressure the regime do not obstruct these operations either in law or in fact.

114. Fifield 2017.

115. This principle is discussed in detail in the section on human security below.

It is plainly insufficient to simply write humanitarian exemptions into sanctions law; the United States and its allies must take additional actions to enable the unobstructed operations of humanitarian groups. Specifically, the United States and its allies should support the construction of designated payment channels and UN “white lists” of legitimate transactions, items, and stakeholders both inside and outside of North Korea. Moreover, they should create a “humanitarian corridor,” a set of established procedures and shipping routes reserved for legitimate humanitarian assistance. To bolster international attentiveness and to address emergent challenges, regular meetings should take place between the staff of the project management mechanism outlined below, the UN resident coordinator, as well as the coordinator and the 1718 Sanctions Committee. States should also actively take precautions and assist humanitarian groups in educating reticent firms and banks to ensure that their national measures do not restrict aid. Together, these steps should help to redress the tendency toward over-implementation of sanctions and enable unrestricted humanitarian work.

Lastly, allies should push to establish an escrow account for sanctions implementation to apply any profit from implementation-focused activities toward the UN humanitarian budget for North Korea. UNSCRs allow countries to sell assets that have been seized or frozen in the course of enforcing UN sanctions. Recognizing the significant shortfalls in commitments to the UN humanitarian budget for North Korea, and mindful of past experiences with escrow accounts in sanctions regimes, the United States and its allies should establish such a mechanism to channel any profit from such activities to the budget required by the UN Resident Coordinator.

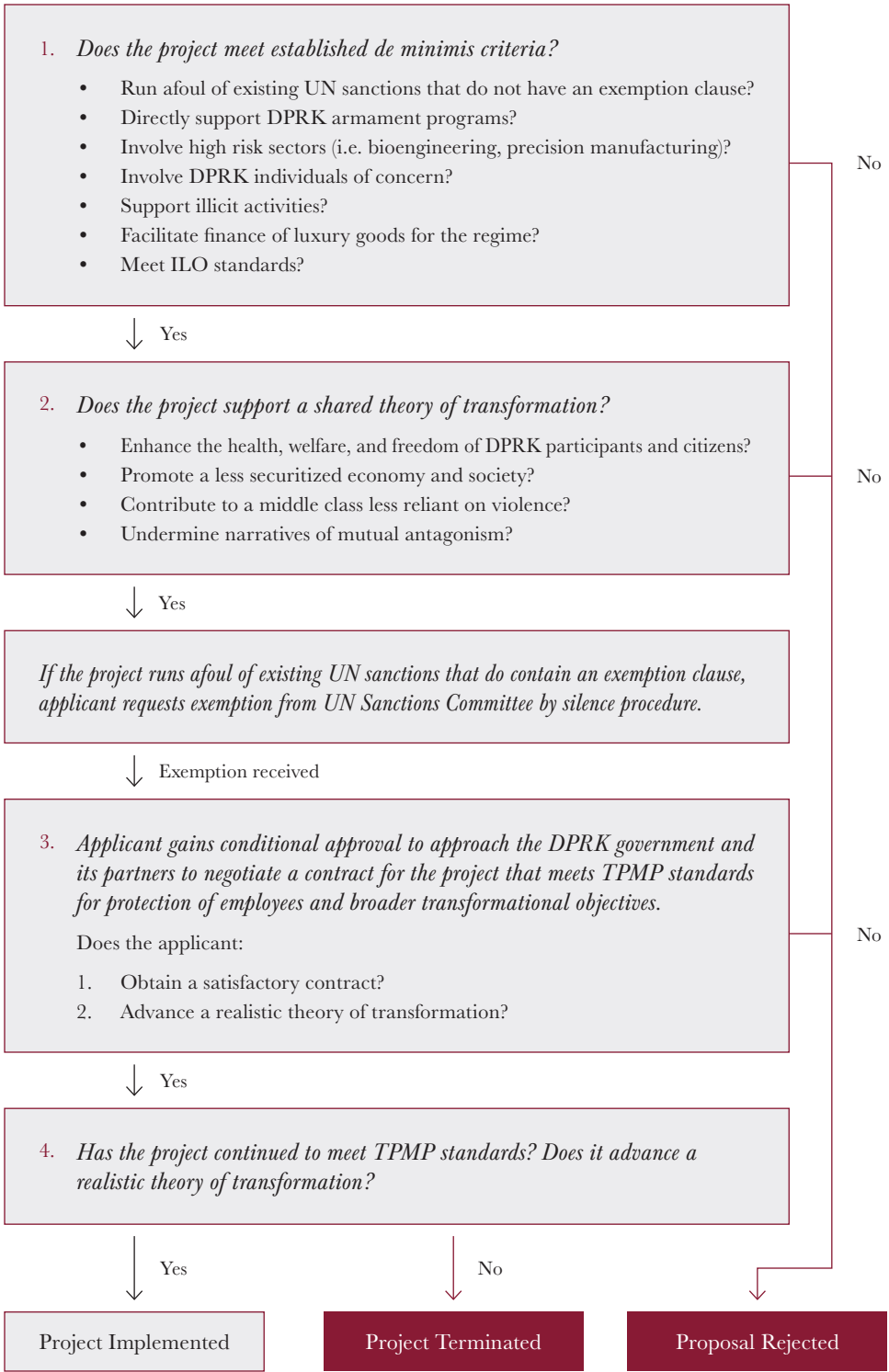
## A FRAMEWORK FOR ECONOMIC ENGAGEMENT

In order to credibly offer economic inducements and to provide a means of shaping the country's evolution, the United States and its global partners should be prepared to engage North Korea economically within clearly defined parameters. Once a threshold agreement is implemented, the United States and its allies should establish a multilateral framework to assess, authorize, and monitor projects on a case-by-case basis, a framework referred to here as a Transnational Project Management Process (TPMP). TPMP should be empowered to ensure that investment ventures, do not fuel irresponsible behavior, are compliant under international sanctions, and are effective instruments for a common theory of transformation that is grounded in the welfare of North Korean citizens. For private companies pursuing profit-seeking ventures, the framework should provide confidence that their activities are sanctions compliant and political cover from regime interference. For governmental development assistance like infrastructure construction, TPMP should represent a means of coordinating and monitoring activity. To ensure that it is insulated from political pressures, humanitarian aid projects should not be subjected to TPMP.<sup>116</sup>

The TPMP should be led by a commission of experts drawn from partner countries and based on a common theory of transformation of North Korea. At the outset, these representatives should develop clear policy objectives, a fair but effective set of procedures and rules, and specific criteria to evaluate and monitor proposals. Represented governments will agree to submit economic projects and development assistance proposals to the procedure. They will also require private firms and individuals under their jurisdiction who are interested in implementing projects in the country to submit applications for projects to—and subject their operations to monitoring by—TPMP.

Each project submitted to TPMP should be subjected to a four-stage process. At the first stage, the commission will assess a proposal against agreed, multilateral *de minimis* criteria that

116. For these purposes, development assistance is typically longer-term activity that aims to improve recipients' quality of life (rather than preventing death or suffering). Humanitarian aid alleviates suffering and prevents deaths and includes the infrastructural work necessary for the delivery of that aid (i.e., establishing cold chain for vaccines). Neither type of assistance generates profit. Where applicable, states should continue to abide by the Organisation for Economic Cooperation and Development's (OECD) Official Development Assistance standards in accordance with established practice. The UN Inter-Agency Standing Committee should continue to monitor and evaluate humanitarian aid distributed through UN agencies, and states should continue to monitor the implementation of aid commitments and submit reports to the OECD.





would distinguish minor and tolerable risk from significant and intolerable risk. Specifically, this step should disqualify any projects that would directly contribute to armament programs, engage high-risk sectors like bioengineering or precision manufacturing, involve North Korean individuals of concern, provide a conduit or fiscal support for illicit activity, or facilitate the purchase of luxury goods for the regime's elite.<sup>117</sup>

117. If a project is rejected at the first stage, TPMP commissioners should assess whether the prevailing considerations necessitate additional recommendations for sanctions designations by any party involved in the proposal.

Stage two of the TPMP evaluation should involve assessing the proposal's utility in the context of wider, shared policy objectives. Would the proposal support the common theory of transformation by advancing the health, welfare, and freedoms of citizens engaged with the project and in the country more broadly; promote a less-securitized economy and society; support a middle elite less reliant on violence for power; or undermine narratives of mutual antagonism with the outside world?

For example, carefully managed investment in North Korean manufacturing processes for consumer goods with a predominantly domestic customer base could constitute projects with manageable risk while also providing employment opportunities and wages to citizens. Products that facilitate agricultural production or personal transport, could be other focal points for acceptable trade and investments. Those that engage North Korea's import-export market, on the other hand, may require North Korea make changes to its trading bureaucracy before allies could have confidence that the project would not be exploited to facilitate illicit trade or finance.

Given the role of the TPMP commission in coordinating investment activity, projects should be approved by consensus. It would be left to the discretion of individual countries whether to subsidize or directly incentivize specific projects or the parties involved, if legal within the confines of an evolving sanctions regime. Partner governments may choose to undertake direct assistance or to underwrite private projects that are particularly constructive for advancing a common theory of transformation but might not yield sufficient profit margins by themselves.

As this mechanism would not involve China, Russia, or other members of the UN Security Council, TPMP cannot be empowered to approve sanctions exemptions. Instead, if the project would violate sanctions and that sanction carries an embedded exemption allowance, the TPMP evaluation process would serve as a prelude to a request for an exemption to the Sanctions Committee. Countries participating in TPMP should also agree to support UN and national sanctions exemptions applications, where relevant, for projects that are approved by the process.<sup>118</sup> TPMP should ensure that requests for exemption, if approved, are valid for a specified period of time and must be extended or renewed using the same silence procedure that initially condoned them.<sup>119</sup> This would embed an automatic political review mechanism and an opportunity to discontinue the project (a form of “snap back”) if the cooperative activity no longer aligns with transformational objectives or labor standards.

If a project satisfies the conditions in stages one and two, in stage three the applicant will gain conditional approval to approach the North Korean government to gain its explicit agreement on the terms of the project.<sup>120</sup> As part of the preparatory work for TPMP procedures prior to the start of project evaluation, the organization should be tasked with consulting a group of experts to draft a set of terms that ensure external investment projects are fair and safe for their North Korean employees and advance a realistic theory of transformation for the country. TPMP should require Pyongyang’s general agreement to this list of general required labor and legal standards prior to considering projects. For example, Pyongyang should agree that:

1. All projects must be subject to ILO standards protecting the rights of workers, including that workers are directly paid a wage for their labor;
2. The regime must sign the New York Convention as a signal of willingness to respect and implement the results of legal arbitration between the state and foreign companies, and then consistently do so;<sup>121</sup>

118. Insofar as the United States and its partners adjust their strategy toward North Korea, efforts to promote greater economic engagement will occur in the context of this revised sanctions strategy. For this reason, the TPMP must assess the state of the sanctions in place at the time any proposal is received, as it affects a project’s desirability and feasibility. Further collaborative opportunities may emerge in the event that particular sanctions are rolled back, negating the need to have the full Sanctions Committee weigh in on the merits of an activity.
119. The Sanctions Committee would employ its existing silence procedure to approve applications.
120. Given that North Korean law, like Chinese law, requires state approval of an investment vehicle, this stage might be understood as also requiring that TPMP to approve the terms of that arrangement. See Feron 2019.
121. This step proposed in *Ibid.*

3. Projects must take place across the country and not be automatically confined to special economic zones designated by the regime;
4. Companies must be allowed to select employees according to their needs and principles of fairness rather than have them designated by the regime; potential employees must be allowed to accept offers of employment as individuals rather than as family units to preserve the independence of women;<sup>122</sup>
5. Companies must be allowed to provide education to employees to ensure fair treatment of women and other classes of employees and must be allowed to terminate these employees in the event these rules are violated;
6. North Korea must offer assurances and consistently demonstrate that foreign citizens will not be imprisoned or harassed for arbitrary or political reasons;
7. Should any disputes with TPMP project employees arise, consular staff (in the case of foreign nationals) and the International Committee of the Red Cross (whether North Korean project staff or foreign national staff) must be allowed timely and regular access to those who are incarcerated in *kyo-hwa-so* facilities, to ensure they are not punished for participation or otherwise subject to human rights abuses;
8. TPMP staff must be allowed unrestricted access to work sites to verify the terms specified in the contract that enabled the project.

122. Individuals must be able to accept employment independently of their spouses or family units in part to protect against the potential for the regime, in the future, to use this requirement to disenfranchise elements of the population in targeted ways as other interventions described in this report take effect and the regime loses mechanisms to control its population. Berry 2015. Furthermore, ensuring that individuals retain the ability to acquire employment independently will enable projects intended to provide opportunities for women experiencing domestic violence.

Certain projects might satisfy the standards in stages one and two only if Pyongyang is willing to agree to additional provisions specific to that project. On a case-by-case basis, TPMP should work with the applicant to develop a list of any additional standards required for a specific project, some of which may in some cases be open for negotiation with the North Korean government and partner entities within the country. Examples of case-by-case terms might include:

1. A commitment to provide a certain level of joint financing for the project;
2. An agreement to permit the project to occur in a specific area or with specific types of workers (for example, women, workers of disfavored *songbun* classes, or those with specific educational backgrounds or experience);
3. Internet access for employees of the project.

Once TPMP obtains any required sanctions exemptions and is presented with a contract that satisfies its requirements, the commissioners can evaluate a project for final approval. If TPMP does approve the project, work can begin.

Following approval, stage four should consist of a robust, multilateral monitoring and evaluation process for every implemented project. The commission should establish strict reporting requirements for partner organizations to regularly demonstrate that their venture continues to comply with regulations and verify the accuracy of these reports. Regular meetings of commissioners should also take place to assess whether the core considerations that resulted in the project's initial approval still obtain.

If a project is found to violate these requirements, or a project is deemed to no longer support TPMP's objectives, TPMP commissioners can opt to work with the company in question to quickly correct the violations or can, at its discretion, terminate the project. The member government that has jurisdiction over the partner entity shall commit to enforce the commission's recommendations, including by terminating the project where appropriate, as a condition of participation. Similarly, at the Sanctions Committee's next decision point regarding the project's extension, allied governments represented on the Committee could object to its continuation. A member government's refusal to act on TPMP recommendations could result in expulsion from the program or could serve as the basis of new multilateral or national sanctions designations, or other diplomatic penalties, as appropriate.

Coordination of economic engagement based on mutually agreed standards will enhance effectiveness, promote cohesion between the partners, provide additional negotiating leverage over the regime, and decrease the risk that resources from partner countries are used to support human rights abuses or illicit activities.

Naturally, North Korea will also retain the ability to decline or obstruct certain proposals. But the regime may permit significant activity so long as it believes that the project will underwrite the political stability of the country, assist with infrastructure renovation and development, promote the health and education of citizens, and add to national prestige—provided that it believes it can control the societal consequences of that project. Similarly, while the lack of Chinese or Russian participation in the mechanism increases the risk that these countries will leverage their less rigorous standards for economic engagement to dominate the North Korean market, as is largely the case at present, Pyongyang is likely to have a strong interest in diversifying its economic relationships away from dependency upon these countries. North Korea repeatedly and consistently expresses its desire for trade and investment cooperation with a larger range of countries, particularly from those states who might participate in TPMP (such as EU members). This is compounded by its clear, present interest in sanctions relief and general international integration, which may be leveraged to gain its buy-in to conditional economic projects through TPMP.

#### FACILITATING ECONOMIC ENGAGEMENT

A key challenge will be that many private sector entities—particularly those based in the United States and allied countries—are likely to remain hesitant about pursuing trade and investment opportunities, due not only to the risk of policy reversals, but also the uncertainties of North Korea’s business and operational environment. To assuage these concerns, the success of TPMP projects will depend on the creation of authorized payment channels to facilitate approved transactions

with North Korean entities.<sup>123</sup> Similarly, allied governments should push for the United Nations to establish “white lists” of North Korean individuals, entities, and items that are authorized for certain economic activities. White lists should be reviewed for compliance on a regular basis.<sup>124</sup>

Going forward, Washington and allied governments should therefore be ready to assume greater risk themselves in order to inspire private-sector confidence in the process. For example, routing designated payment channels through central banks can provide strong and reassuring messages to the private sector about the legitimacy of a particular transaction. Should prohibitions on public/private financing be eventually lifted, the provision of government financial support to projects would have a similar effect.

As an additional step, the United States and its allies should support the establishment of a non-investigatory and non-voting technical advisor role within the UN Panel of Experts on North Korea or attached to the 1718 Sanctions Committee. The panel has not been adequately resourced or mandated to provide technical assistance to those tasked with implementing resolutions. Many countries and companies therefore continue to struggle to understand what is permissible under the resolutions and how certain provisions can be operationalized at a domestic level. Increasing the availability of such advice and expertise will be especially important as the sanctions regime becomes more complex due to exemptions, carve-outs, or roll-back. A technical advisor would support the panel’s mandate by helping UN member states implement provisions still in place, understand any recent changes, and appreciate exemptions. The advisor would also complement any separate multilateral technical-assistance program.

As TPMP unfolds, national governments may need to modify various laws and regulations to facilitate economic projects. These domestic jurisdictions must coordinate their efforts to prevent loopholes for prohibited weapons procurement and to ensure all actors, whether humanitarian or otherwise, follow the export-control and anti-money laundering laws and reg-

123. For a related proposal for South Korean activities, see Abrahamian 2017.

124. These white lists should be developed and updated in addition to those that facilitate humanitarian transactions. In practice, the difficulties of disentangling the activities of white-listed and non-white-listed entities and individuals will pose a significant challenge for any whitelisting effort. Even if agreement is reached at a political level, many private sector entities may still deem the risks of engaging with white-listed entities as too high.

ulations of their jurisdiction. The transfer of dual-use equipment, knowledge or services, or the financing of dual-use activities remains of great concern. Historically, North Korea has successfully exploited weak knowledge and capacity of export controls systems to procure equipment, knowledge, and services for its WMD and military programs. If states expand their economic ties with North Korea, it will be necessary to strengthen rather than relax national and transnational efforts to educate industry and NGOs on licensing and transfer of dual-use and controlled items.

## 6. *Human Security*

Though diplomatic *détente* during 2018 at least temporarily reduced tensions on the peninsula, it has not yet yielded commensurate improvements in the welfare of the North Korean people. In fact, human rights and humanitarian groups have been forced to curtail their operations inside the country. Though President Moon Jae-in has argued that “bringing permanent peace to the peninsula will promote human rights of all people,”<sup>125</sup> neither Seoul nor Washington has yet integrated human rights into the other aspects of its policies toward North Korea.

A policy designed to shape North Korea’s transformation should seek to provide the North Korean people with the standard of living and resources to gain a greater role in shaping their society into a more just and responsible state. The North Korean people deserve a major and sustained effort by the international community to support their health and human rights. Humanitarian initiatives should be strictly insulated from other aspects of North Korea policy and be supported unconditionally as long as those projects are allowed to achieve their intended effect. The United States and its allies should also significantly expand their support for programs advancing the human rights of North Koreans—both those that occur with the cooperation of the regime, like the standards built into economic investment projects, and those that do not.

### HUMANITARIAN ASSISTANCE

Humanitarian funding for North Korea has been steadily declining since 2012, with only a fraction of the UN Resident Coordinator’s request committed for 2018.<sup>126</sup> The study group notes the UN Office for the Coordination of Humanitarian Affairs, geopolitical tensions have had “significant impacts on humanitarian agencies’ ability to raise sufficient funds.”<sup>127</sup> The study group believes that any deliberate link-

125. Moon 2018.

126. Financial Tracking Service 2018.

127. UN Office for the Coordination of Humanitarian Affairs 2018.



age would not only be morally indefensible but also counter-productive with respect to a long-term effort to eliminate the North Korean nuclear arsenal. Together with the practical difficulties that humanitarian operations have faced as a result of the escalation of sanctions in 2018, the funding decline has crippled much of the humanitarian-assistance work in North Korea.<sup>128</sup>

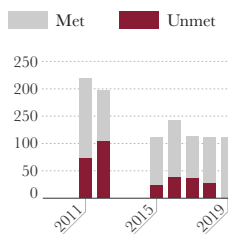
Both as a moral imperative and as the most effective way to secure practical interests, the study group recommends that the United States and its allies support a major effort to provide for the humanitarian needs of North Koreans via the relevant UN agencies and international NGOs. In the study group’s judgment, humanitarian assistance that alleviates suffering and prevents deaths should be strictly insulated from domestic political fluctuations and be made unconditional. As discussed above, the economic sanctions should be modified and compensatory measures taken to alleviate any distortion they pose on legitimate humanitarian activities.

Given Pyongyang’s ability to exploit gaps in coordination, the United States and its allies and partners should also prioritize multilateral assistance channels over bilateral ones. Specifically, concerned countries should fully meet the UN Resident Coordinator’s annual requests for humanitarian funding to alleviate acute suffering before pursuing their own supplementary bilateral development assistance programs.

In the past, the regime has diverted aid away from constituencies that international agencies identified as being most in need.<sup>129</sup> To ensure the regime does not restrict transparency to take the path of least accountability,<sup>130</sup> humanitarian organizations should jointly develop and share minimum standards for monitoring their activities as well as practical information about any restrictions on their operations. Adding more Korean speakers among aid workers and assessment teams can reduce the need to rely on the regime for translation, improve evaluation of program delivery, and convey a consistent message about the purpose and nature of their work to recipients. Evidence of significant diversion of humanitarian and devel-

- 128. Cheng 2018.
- 129. Haggard and Noland 2005.
- 130. Manyin and Nikitin 2014.

UN Needs and Priorities Request for DPRK by Year: Met and Unmet Requirements (Millions, USD)



Source: Financial Tracking Service, 2018

Prevalence of Undernourishment (3-Year Average) (Percentage)



Source: Food and Agriculture Organization

opment assistance to enrich the elite should trigger a reassessment and adjustment of a policy of unqualified assistance to ensure effectiveness, but the study group notes that these concerns have diminished in recent years.<sup>131</sup>

131. Park and Kim 2018.

132. UN Human Rights Council 2017.

Until Pyongyang implements the threshold agreement, makes consistent progress on security-related issues, and can demonstrate that it has increased its expenditures for economic development and humanitarian activities, the United States and its allies should confine their efforts to enhancing humanitarian assistance and small-scale economic and development-related projects. To the extent that infrastructure improvements are required for the effective and efficient provision of vital relief, the United States and its allies should be willing to underwrite those projects. Though limited forms of development assistance such as advising on agricultural practices or economic reform are desirable, expansive assistance programs, particularly profit-generating economic projects that are funded by streams outside of Official Development Assistance, should be subject to TPMP for approval and administration.

Donor countries should also clearly communicate that the overall goal of assistance efforts is for North Korea to be self-sufficient in providing for the health and welfare of its population. In line with this objective, countries should aim to share responsibility for project financing with North Korea from the outset. They should consider proposing that certain types of development assistance be conditional on “match” or in-kind support from the regime.

## HUMAN RIGHTS

The release of the COI was instrumental in mobilizing global agreement that North Korea is engaging in “systematic, widespread and grave” human rights violations, and that the situation demands action by the international community.<sup>132</sup> Persistent violations have severely degraded Pyongyang’s international legitimacy and created justified concerns about engaging with the regime. Even if it has been unwilling to reform its practices, Pyongyang appears sensitive to the ef-

fects of its actions on its international legitimacy and practical opportunities for foreign investment. Though the regime formally rejects the specific findings of the COI and the general global discussion over its human rights record,<sup>133</sup> it has also attempted to engage with the international human rights community by articulating its own version of human rights, focusing primarily on the rights of the group such as social, economic, and cultural rights, but excluding political and civil rights.<sup>134</sup>

There is modest evidence that conditions and practices in prison camps have improved in recent years, but Pyongyang has effectively rejected repeated international condemnations,<sup>135</sup> ignored pressure from the United States and its allies, and resisted the efforts of international organizations. As noted above, there is no guarantee that the passage of time or economic development will lead the regime to respect the political and civil rights of its citizens. Indeed, Pyongyang tends to exploit additional resources and new technologies to solidify its system of internal control.

As in other policy areas, the United States and its partners and allies must develop a coordinated and consistent policy on human rights in North Korea. These countries and the international community more generally have been inconsistently attentive to human rights in North Korea. A more consistent and effective approach will require that the United States and its allies maintain informed and influential staffs within their governments, regularly exchange information and policy positions in their bilateral and multilateral exchanges, and consistently raise the issue in their interactions with North Korea.

The United States and its allies have generally prioritized non-cooperative approaches to human rights that are undertaken without the assistance or over the objection of the regime. These should be enhanced in the coming years to counteract the regime's expanded efforts to control information and suppress refugees. Specifically, the United States and its allies should step up their efforts to secure multilateral diplomatic condemnations of human rights abuses, support nongovern-

133. Korean Central News Agency 2013. The regime argues that human rights concerns are a device of the United States and its allies to promote regime change. Erlanger 2013.

134. Democratic People's Republic of Korea 2009.

135. For thirteen consecutive years, the United Nations General Assembly has adopted a resolution condemning the DPRK's treatment of its own people, and in the last several years those resolutions were adopted by consensus. UN Commission of Inquiry on Human Rights in the Democratic People's Republic of Korea 2014.

mental research on the state of human rights within the regime, designate culpable North Korean officials under human rights sanctions, and consistently pressure officials in bilateral and multilateral meetings to improve their practices. These actions are necessary to demonstrate that advancements on human rights are critical for North Korean development and international legitimacy and not a political tool of the United States.

In addition, any increased economic and humanitarian interactions represent opportunities to expand cooperative initiatives on human rights, meaning projects in which Pyongyang has explicitly agreed to be subject to explicit standards that advance certain human rights. Cooperative projects have the potential to break through the diplomatic impasse on human rights dialogues, spread the concept of human rights within North Korea, and embed human rights standards in economic and legal institutions as they evolve over the coming decades.

Improving the flow of information into and within North Korea will be important in advancing an allied theory of transformation. The United States and its allies should expand their investment in human rights NGOs that provide the North Korean people with outside information and transmit North Korean voices to the rest of the world, including through radio broadcasts and clandestine smuggling operations. The US, South Korean, and Japanese governments should refuse to silence NGOs that speak out about conditions within North Korea or to assist refugees. The United States and its allies should reiterate that information dissemination initiatives, like other elements of government policy, do not seek to promote regime collapse.

Increasing protection of, support for, and cooperation with DPRK refugees and defectors must be a key component of allied policy. Defectors are an important source of information about their country, especially at a time when first-hand human intelligence is limited, and they are often the most effective advocates for government policy innovation and civ-

il-society initiatives that encourage North Korea to transform. They are uniquely positioned to break down North Korea's internal narratives about its perceived adversaries and the securitized system built on these narratives. For these reasons, the United States and its allies should increase their support for refugees and their political activities. These partners should actively and continually demarche countries that are pathways for DPRK defectors to urge them to cease forcible repatriations of North Koreans trying to flee. They should also increase protection and advocacy for North Koreans who have escaped the country in order to improve their chances of safe resettlement. Halting forcible repatriation should be a leading agenda item in discussions with China about potential areas of cooperation under the new strategy. South Korea and other countries should expand their efforts to alleviate the discrimination, social isolation, and professional challenges that some refugees face once they have resettled.<sup>136</sup>

Partners less directly entangled in the security dynamics of the peninsula—including European countries, Canada, Australia, and others—have an important role to play in noncooperative human rights initiatives. By expanding their contributions, these countries can provide additional assurance that though these efforts are not cooperative, they are not political instruments for regime change.

Even as they expand noncooperative initiatives, the United States and its allies should also leverage the cooperative opportunities afforded by enhanced economic and humanitarian interactions to expand and protect North Koreans' rights, initiate new efforts to gain access to the most vulnerable, and press the regime to contribute to human rights initiatives.

Human rights are an essential feature of an effective theory of transformation for North Korea. The economic and humanitarian projects that support this theory must be tailored to ensure that they promote the human rights both of those North Koreans who interact directly with those projects and the society as a whole. Economic projects and financial investments should be conditional on the regime making specific commit-

ments to protect the human rights of employees associated with that project. For example, North Korean citizens that contract with foreign firms must be allowed to retain wages from their labor, to work in conditions that satisfy to ILO standards, to be regularly accessed by international human rights NGOs and consular staff if incarcerated, to petition for legal rights under a system of arbitration and to have the results of that arbitration honored, and to access information necessary to perform their duties. Over time, these practices will begin to create spaces that more fully respect the human rights of North Korean citizens.

One challenge of advancing human rights through cooperative projects is to avoid incentivizing the creation of a segregated legal system where the rights of citizens employed by foreign firms are privileged and protected while those not contracted by foreign firms remain subject to the arbitrary whims of the state. Therefore, TPMP's continued approval of these projects should be in part contingent on a continual expansion of these spaces of protected rights—to include more extensive rights, new geographic regions, and new demographics in the population. The study group expects that economic interventions can create a competent, growing workforce that can incentivize the government to respect freedom of movement, merit-based advancement, and increased access to information from the outside world over time. Under a realistic theory of North Korean transformation, creating examples of improved conditions is not only substantively important to improving the living standards of employees of those ventures but also to disseminate the concept of rights and the knowledge that working conditions inside North Korea can and should be improved. It is also important to demonstrate to the regime that these kinds of initiatives can serve its interests in economic and social development.

Pyongyang may also be willing to participate in cooperative projects that improve the human rights of its citizens, especially vulnerable populations. For example, the UN Human Rights Commission annual review notes that North Korea has agreed to improve the rights of national constituencies

such as the disabled, women, and children, and acknowledges the need to make further improvements in these areas.<sup>137</sup> The United States and its allies should further explore the possibility of practical, approved projects to address these concerns, including projects to enhance the living standards and mobility of the disabled; to provide business, finance, and legal training for entrepreneurs;<sup>138</sup> to promote nondiscrimination and protection for women entrepreneurs in marketplaces around the country; and provide creative educational opportunities for youth. Expanded people-to-people exchanges, discussed below, are also important opportunities to promote the human rights of North Koreans. The United States and its allies should be willing to help fund these kinds of projects and to ensure that Pyongyang agrees to respect their intended purposes.

137. UN Human Rights Council 2017.

138. Since 2010, the Chosun Exchange has demonstrated that these kinds of training programs can take place inside North Korea.

## 7. *Diplomacy*

North Korea's acquisition of a nuclear-weapon capability is re-drawing the diplomatic landscape of Northeast Asia. As the United States and its allies and partners deprioritize disarmament in favor of a sustainable effort to manage and transform the regime, they will have to renovate their diplomatic relations with Pyongyang, with Beijing and Moscow, and with each other. A rapid shift in the agenda is necessary not only to manage the diplomatic challenges that emerged in 2018, but also to transform these diplomatic relationships so they can serve as a groundwork for a more stable Northeast Asia.

As soon as is practical, the United States and North Korea should establish interest sections in their respective capitals. These units should not only facilitate the negotiation and implementation of a threshold agreement to establish stability; they should also enable more consistent and effective diplomatic engagement with Pyongyang in the coming decades, including by arranging programs for interpersonal engagement between North Koreans and citizens of democratic countries. Economic and diplomatic pressure on Beijing and Moscow to assist in immediate disarmament should be replaced by efforts to cooperate on areas of mutual concern and to prevent activities that undermine core objectives. Though Washington, Seoul, and Tokyo will each take distinctive approaches toward the regime, these relationships require significant attention to prevent divergences that have formed since early 2017 from inhibiting efforts to manage and transform North Korea.

### INTERPERSONAL ENGAGEMENT

The cultural, educational, and political isolation of the North Korean people is a critical component of the regime's system of control. In the judgment of the study group, the United States and its allies must shape the transformation of the regime not only through economic and diplomatic policy but also by promoting regular interactions between the North Korean people and the outside world.



The international community should create additional opportunities for academic, professional, cultural, and athletic exchanges; and opportunities for North Koreans who work both inside and outside of government to receive training abroad. Partner countries should modify their national laws as necessary to enable exchanges. South Korea's National Security Law and May 24 Measures should be modified to permit civil groups to engage with North Koreans on and off the peninsula. The ban on Americans travelling to North Korea should not be renewed after its expiry in August 2019, though travel advisories should be maintained and emphasized as appropriate. As discussed above, US and UNSC sanctions should be revised to enable humanitarian engagement not just in text but in fact. In their current form, these laws not only constrain and inhibit international attempts to shape North Korea's evolution but also unduly abridge the civil rights of US and South Korean citizens.

International partners will have to manage significant risks associated with these exchanges. Careful monitoring will be required to ensure exchange programs do not infringe on sanctions or provide opportunities for North Koreans to access prohibited goods or services, especially those with national security implications; to protect foreign nationals in North Korea; and to ensure that resources are not diverted to military programs.

#### INTEREST SECTIONS

The intermittent engagement that has characterized US and allied approaches to North Korea has hindered the effectiveness of these efforts. Now that North Korea has crossed the nuclear threshold, diplomatic volatility carries unacceptable risks. A permanent diplomatic exchange is needed to manage the deterrence relationship, reduce security risks, and provide opportunities to shape the country's transformation.

Enhancing existing mechanisms for consistent diplomatic engagement with Pyongyang and creating new ones where necessary should be a major priority for the near and medi-

um term. The United States and its allies should make every effort to create reliable channels for diplomatic engagement staffed by experts on a range of issues.

139. Bard 2019.

140. Wit 2017.

To this end, the United States and North Korea should rapidly establish interest sections in each capital staffed by mid-level civil servants drawn from the regular diplomatic corps.<sup>139</sup> While Pyongyang already has some representation in the United States by virtue of its UN membership, the United States has no analogue in Pyongyang and tends to rely on the New York channel or intermediaries of other countries to convey messages.<sup>140</sup> Establishing a physical representation in Pyongyang could enhance the credibility of US security assurances as the United States would be less likely to launch a surprise attack on North Korea while its diplomats are on the ground in Pyongyang. It would also have major practical significance; an interest section would facilitate a more robust communications channel that allows US officials to interact regularly with central actors in Pyongyang rather than peripheral New York-based diplomats. It could help with substantive and logistical preparations for political and non-political interactions between the two countries and would constitute an additional source of on-the-ground information. It could also eventually be used to support monitoring of joint economic or arms-control projects. If co-housed with the diplomatic representations of other allies—including the United Kingdom, Germany, France, and Sweden—it would serve as an additional mechanism for multilateral coordination and information sharing.

While establishing interest sections carries risks, these are manageable. Pyongyang will inevitably seek to use the creation of a US interest section for domestic propaganda. This is tolerable, as long as the United States makes clear that an interest section is not part of an automatic progression toward full diplomatic relations. More formal diplomatic ties should be treated as a substantial concession, and should follow a peace treaty and durable positive change in Pyongyang's security and human rights behavior.

As with humanitarian programs, the United States and its allies should agree to insulate interest sections and other diplomatic channels from domestic political changes. The channels should remain open and operative in all circumstances except those that would endanger the safety of diplomats. To enable this, more than one diplomat should be placed in each capital so that the head of section can be recalled without severing the channel.

## CHINA AND RUSSIA

To the extent that the United States takes regional stability, deterrence, containment, and development as its guiding objectives toward North Korea, it will find additional overlap with China's interests. As they consider transitioning to a new strategy, US and allied diplomats should pressure Beijing and Moscow to focus their efforts on restricting Pyongyang's most dangerous activities. Specifically, China and Russia should be incentivized to cooperate on counterproliferation activities and minimizing North Korea's trans-border crime.<sup>141</sup>

A shift to prioritize stability and increasingly open economic engagement should generate considerable leverage to pressure China to improve coordination on areas of common interest, including coordinated deterrent statements to prevent destabilizing DPRK activity like cross-border crime, subconventional attacks, and nuclear tests.<sup>142</sup> The United States and its allies should continue to push Beijing to engage in coordinated planning for security contingencies related to North Korea, including humanitarian crises and military operations around the peninsula to decrease the risk of contact between US and Chinese forces. As they prioritize nonproliferation as an objective of their sanctions enforcement policies, the United States and its partners should encourage China to do the same.

Even with an expansion of common ground with China, there will continue to be considerable points of tension. Though Beijing, Washington, and Seoul can agree on general parameters for North Korea's economic development (includ-

141. For example, the United States and its allies should coordinate with Beijing on the timing and sequence of any future efforts to lift UNSC and autonomous sanctions within the stages outlined above.

142. Mount 2017.

ing infrastructure investment, expansions of certain economic sectors, efforts to improve food security and public health), Beijing will retain its own theory of transformation that may diverge from the one that the United States and its allies seek to advance. It will neglect or resist efforts to improve human rights and information transparency as subversive of its own system of government, and will most likely defy any attempts to ensure that its development efforts adhere to these standards.

Russia's relationship with North Korea is warming, and Moscow is initiating new maritime and overland trading activities,<sup>143</sup> opening a new internet connection,<sup>144</sup> admitting DPRK workers,<sup>145</sup> and permitting clandestine transfers of sanctions-prohibited goods.<sup>146</sup> If this relationship continues to expand, it could pose considerable challenges to deterrence, trading restrictions, the credibility of international sanctions and nonproliferation efforts, and efforts to transform the regime.

Though they should not be party to it, Chinese and Russian assistance will be important for securing a viable threshold agreement and will be helpful in implementing it. US strategists must resist the temptation to use North Korea policy as a bargaining chip in seeking broader security objectives.

Beijing and Moscow could be constructive participants in an effort to manage and transform North Korea, or could choose to resist and irritate these efforts and empower Pyongyang to do the same. Neither is inevitable. Only skilled and sustained diplomacy can make a virtue of these relationships.

#### RENOVATING US ALLIANCES

In the judgment of the study group, the period from 2016-2018 has seen alarming but uneven declines in the effectiveness of coordination within the US-ROK and US-Japan alliances and also between Seoul and Tokyo. Major policy divergences have emerged that could inhibit efforts to make progress toward meeting outlined objectives. If Washing-

143. Zakharova 2016.

144. Taylor 2017.

145. Talley and Kurmanaev 2018.

146. Asan Institute for Policy Studies 2018.

ton, Seoul, and Tokyo are to manage and transform a nuclear-armed North Korea, they will have to renovate their relationships to provide for more coordinated, nuanced, and sustained initiatives.

Consistent and sustained coordination at all levels of government is necessary both to develop joint defense and security, economic, and humanitarian policies and to maximize leverage, credibility, and effectiveness in their implementation.

Trilateral coordination on North Korea has lagged far behind its potential. Especially since 2017, divergent approaches in diplomatic outreach and sanctions have allowed Pyongyang considerable latitude to delay or resist proposals and encouraged the regime to attempt to exploit these divisions, which it has done with some success. Resistance to trilateral coordination will afford Pyongyang additional opportunities to attempt to divide them with coercive threats, to repress its own people, and to engage in clandestine trade and finance activities. Improving intelligence-sharing mechanisms about North Korea's trading activities would strengthen the ability of the United States and its allies to prevent proliferation of military technology and other prohibited activities.

The US-ROK alliance is facing fundamental challenges. In addition to the challenges to allied deterrence policy discussed above, the alliance has been strained by divergent approaches to diplomacy, sanctions, economic inducements, and other issues. At the same time, the alliance will have to contend with the security and economic implications of a rising China. A comprehensive alliance review of North Korea and military policy is necessary to place the alliance on firmer footing to face a changing region.

The United States, South Korea, and Japan should work together to press for a realistic means of addressing North Korea's past abductions of their foreign nationals. Though Japan may not permit economic engagement or sanctions relief at the same pace as its partners, a satisfactory process to address the abduction issue is necessary not only for transforming

Pyongyang's standing in the region but also to unlocking Japanese aid and investment as a powerful force in transforming North Korea's economy.

## 8. *Conclusion*

North Korea has developed a credible nuclear capability in part because the United States and its allies were highly inconsistent in seeking a negotiated agreement with the regime. Now that the effort to prevent this capability has failed, maintaining political will and alliance coordination and devoting resources to managing and transforming North Korea has never been more imperative or challenging. Without the fiction of a proximate nuclear-weapon-free North Korea, policy successes are likely to be partial, gradual, or consist in the prevention of disastrous events. Even under the best of circumstances, failures will be commonplace—whether they are ongoing human rights atrocities or repeated attempts to break out of sanctions and deterrence restrictions.

Yet, a nuclear-armed North Korea makes it more important than ever that the United States and its allies continue to prioritize the issue. The regime's ability to exploit technological changes to enhance its internal control and to circumvent international sanctions are unprecedented. The consequences of deterrence failure or accidental military escalation could be catastrophic. If North Korea policy is allowed to drift without a revision, the strategic and practical consequences could be grave.

The critical national security interests and moral responsibilities at stake require that the United States and its partners undertake a sustained effort to actively manage and transform North Korea. It is still possible to create a morally tolerable and stable Northeast Asia, provided that the United States and its allies craft a realistic strategy and devote to it the requisite time, attention, and resources to see it succeed.





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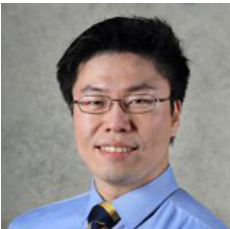


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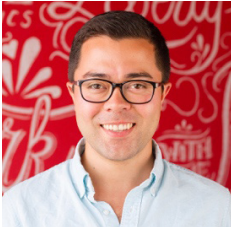


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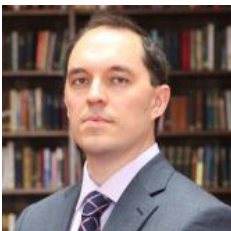
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# Bibliography

- Abrahamian, Andray. 2017. How to (or Not to) Reboot the Sunshine Policy. *38 North*. Available at <<https://www.38north.org/2017/05/aabrahamian050317/>>. Accessed 10 February 2019.
- Albright, David, Sarah Burkhard, Allison Lach, and Andrea Stricker. 2017. *Countries Involved in Violating UNSC Resolutions on North Korea*. Available at <[http://isis-online.org/uploads/isis-reports/documents/Countries\\_Involved\\_in\\_Violating\\_NK\\_UNSC\\_Resolutions\\_5Dec2017\\_Final.pdf](http://isis-online.org/uploads/isis-reports/documents/Countries_Involved_in_Violating_NK_UNSC_Resolutions_5Dec2017_Final.pdf)>. Accessed 26 December 2018.
- Alexander, Harriet. 2018. Russia and China's calls to lift North Korea sanctions rejected by Mike Pompeo. *The Telegraph*. Available at <<https://www.telegraph.co.uk/news/2018/09/27/russia-chinas-calls-lift-north-korea-sanctions-rejected-mike/>>. Accessed 26 December 2018.
- Allard, Leonie, Mathieu Duchatel, and Francois Godement. 2017. Pre-empting defeat: In search of North Korea's nuclear doctrine. Available at <[https://www.ecfr.eu/publications/summary/pre\\_empting\\_defeat\\_in\\_search\\_of\\_north\\_koreas\\_nuclear\\_doctrine](https://www.ecfr.eu/publications/summary/pre_empting_defeat_in_search_of_north_koreas_nuclear_doctrine)>. Accessed 19 December 2018.
- Asan Institute for Policy Studies. 2018. *The Rise of Phantom Traders: Russian Oil Exports to North Korea*. Seoul, South Korea: Asan Institute for Policy Studies. Available at <<http://en.asaninst.org/contents/the-rise-of-phantom-traders-russian-oil-exports-to-north-korea/>>. Accessed 22 January 2019.
- ASEAN Regional Forum. 2007. *Documents Series 1994-2006*. Available at <<http://www.asean.org/uploads/archive/5187-9.pdf>>. Accessed 22 January 2018.
- Associated Press. 2017. Report: Egypt cuts military ties with North Korea. *Associated Press*. Available at <<https://www.apnews.com/e47770b197954eb8b11780fc21059d84>>. Accessed 22 January 2019.
- Back, Jieun. 2017. The Opening of the North Korean Mind. *Foreign Affairs* 96 (1). Available at <<https://www.foreignaffairs.com/articles/north-korea/2016-11-28/opening-north-korean-mind>>. Accessed 27 August 2018.
- Bard, Abby. 2019. Ahead of the Second Trump-Kim Summit, the US Should Open Pyongyang Liaison Office. *The Diplomat*. Available at <<https://thediplomat.com/2019/02/ahead-of-the-second-trump-kim-summit-the-us-should-open-pyongyang-liaison-office/>>. Accessed 20 February 2019.
- Bell, Mark S., and Juiia Macdonald. 2018. Toward Deterrence: The Upside of the Trump-Kim Summit. *War on the Rocks*. Available at <<https://warontherocks.com/2018/06/toward-deterrence-the-upside-of-the-trump-kim-summit/>>. Accessed 2 February 2019.
- Berger, Andrea. 2015. *Target Markets: North Korea's Military Customers*. Vol. 84. Whitehall Papers. Routledge. Available at <<https://www.tandfonline.com/toc/rwhi20/84/1?nav=toCList>>. Accessed 22 January 2019.

- Berger, Andrea. 2017. *Target Markets: North Korea's Military Customers*. Routledge.
- Berger, Andrea, and Shea Cotton. 2018. Walls and Ladders: The Latest UN Panel of Experts Report on North Korea Sanctions. *War on the Rocks*. Available at <<https://warontherocks.com/2018/03/walls-and-ladders-the-latest-un-panel-of-experts-report-on-north-korea-sanctions/>>. Accessed 22 January 2019.
- Bermudez, Joseph S. 2018. *North Korean Special Operations Forces: Hovercraft Bases (Part II)*. Center for Strategic and International Studies. Available at <<https://beyondparallel.csis.org/north-korean-special-operations-forces-hovercraft-bases-part-ii/>>. Accessed 22 January 2019.
- Berry, Marie E. 2015. When 'Bright Futures' Fade: Paradoxes of Women's Empowerment in Rwanda. *Signs: Journal of Women in Culture and Society* 41 (1): 1–27.
- Bolton, John. 2018. National Security Advisor John Bolton On His Trip To Russia, The Missing Saudi Jamal Khashoggi, Iran, China and Big Tech. *The Hugh Hewitt Show*. Available at <<http://www.hughhewitt.com/national-security-advisor-john-bolton-on-his-trip-to-russia-the-missing-saudi-jamal-khashoggi-iran-china-and-big-tech/>>. Accessed 28 November 2018.
- Borger, Julian. 2017. North Korea details Guam strike plan and calls Trump 'bereft of reason'. *The Guardian*, sec. World. Available at <<https://www.theguardian.com/world/2017/aug/10/north-korea-details-guam-strike-trump-load-of-nonsense>>. Accessed 15 January 2019.
- Brown, William. 2018. North Korea's Shackled Economy. National Committee on North Korea. Available at <<https://www.ncnk.org/resources/briefing-papers/all-briefing-papers/special-report-north-koreas-shackled-economy-2018>>.
- Carlin, Robert, and Robert Jervis. 2015. Nuclear North Korea: How Will It Behave? U.S.-Korea Institute at SAIS. Available at <<http://38north.org/wp-content/uploads/2015/10/CarlinJervis-final.pdf>>.
- Cha, Victor. 2018. Giving North Korea a 'bloody nose' carries a huge risk to Americans. *Washington Post*. Available at <[https://www.washingtonpost.com/opinions/victor-cha-giving-north-korea-a-bloody-nose-carries-a-huge-risk-to-americans/2018/01/30/43981c94-05f7-11e8-8777-2a059f168dd2\\_story.html](https://www.washingtonpost.com/opinions/victor-cha-giving-north-korea-a-bloody-nose-carries-a-huge-risk-to-americans/2018/01/30/43981c94-05f7-11e8-8777-2a059f168dd2_story.html)>. Accessed 17 December 2018.
- Cha, Victor, and Lisa Collins. 2018. *The Markets: Private Economy and Capitalism in North Korea*. Center for Strategic and International Studies. Available at <<https://beyondparallel.csis.org/markets-private-economy-capitalism-north-korea/>>.
- Chalmers, Hugh. 2016. Producing Tritium in North Korea. *Trust & Verify* 153 (1).
- Cheng, Jonathan. 2018. North Korea Expands Key Missile-Manufacturing Plant. *Wall Street Journal*, sec. World. Available at <<https://www.wsj.com/articles/north-korea-expands-key-missile-manufacturing-plant-1530486907>>. Accessed 27 August 2018.
- Cheon, Seong Whun. 2017. *Managing a Nuclear-Armed North Korea:: A Grand Strategy for a Denuclearized and Peacefully Unified Korea*. Asan Institute for Policy Studies. Available at <<https://www.jstor.org/>>



- stable/resrep08121>. Accessed 16 August 2018.
- Connolly, Gerald E. 2018. *North Korea's Challenge to International Security*. Available at <<https://www.nato-pa.int/document/2018-north-koreas-challenge-international-security-implications-nato-connolly-report-179>>. Accessed 17 December 2018.
- Democratic People's Republic of Korea. 2009. *National Report Submitted in Accordance with Paragraph 15 (A) of the Annex to Human Rights Council Resolution 5/1*. DPRK Mission to the UN. Available at <[https://lib.ohchr.org/HRBodies/UPR/Documents/Session6/KP/A\\_HRC\\_WG6\\_6\\_PRK\\_1\\_E.pdf](https://lib.ohchr.org/HRBodies/UPR/Documents/Session6/KP/A_HRC_WG6_6_PRK_1_E.pdf)>. Accessed 22 January 2019.
- Denmark, Abraham. 2017. The U.S. Can't Get Rid of North Korea's Nukes Without Paying a Catastrophic Price. *Foreign Policy*. Available at <<https://foreignpolicy.com/2017/09/15/the-u-s-cant-get-rid-of-north-koreas-nukes-without-paying-a-catastrophic-price/>>. Accessed 30 August 2018.
- Draudt, Darcie, and John K. Warden. 2017. The Strategic Rationale for Maritime Tension Reduction in the Yellow Sea. *The Washington Quarterly* 40 (4): 183–197.
- Dunford, Gen. Joseph F. 2017. *Hearing to Consider the Nomination of Joseph F. Dunford, Jr., USMC, for Reappointment to the Grade of General and Reappointment to be Chairman of the Joint Chiefs of Staff*. Washington, DC. Available at <[https://www.armed-services.senate.gov/imo/media/doc/17-80\\_09-26-17.pdf#page=37](https://www.armed-services.senate.gov/imo/media/doc/17-80_09-26-17.pdf#page=37)>. Accessed 22 January 2019.
- Einhorn, Robert, and Pifer, Stephen. 2017. *Meeting U.S. Deterrence Requirements*. Brookings Institution. Available at <[https://www.brookings.edu/wp-content/uploads/2017/09/fp\\_20170920\\_deterrence\\_report.pdf](https://www.brookings.edu/wp-content/uploads/2017/09/fp_20170920_deterrence_report.pdf)>. Accessed 7 May 2018.
- Erlanger, Steven. 2013. U.N. Panel to Investigate Human Rights Abuses in North Korea. *New York Times*. Available at <<https://www.nytimes.com/2013/03/22/world/europe/un-panel-to-investigate-human-rights-abuses-in-north-korea.html>>. Accessed 22 January 2019.
- Feron, Henri. 2019. The Hermit Kingdom's Chinese Reforms: The North Korean Foreign Investment Regime. *Social Science Research Network*. Available at <[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3322232](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3322232)>.
- Fifield, Anna. 2017. Sanctions are hurting aid efforts — and ordinary people — in North Korea. *Washington Post*. Available at <[https://www.washingtonpost.com/world/asia\\_pacific/sanctions-are-hurting-aid-efforts--and-ordinary-people--in-north-korea/2017/12/15/df57fe6e-e109-11e7-b2e9-8c636f076c76\\_story.html](https://www.washingtonpost.com/world/asia_pacific/sanctions-are-hurting-aid-efforts--and-ordinary-people--in-north-korea/2017/12/15/df57fe6e-e109-11e7-b2e9-8c636f076c76_story.html)>. Accessed 28 August 2018.
- Financial Tracking Service. 2018. DPR Korea Needs and Priorities 2018 Summary of Aid Flows. UN Office for the Coordination of Humanitarian Affairs. Available at <<https://fts.unocha.org/appeals/659/summary>>. Accessed 22 January 2019.
- Food and Agricultural Organization of the United Nations. 2017. *Prolonged dry weather threatens the 2017 main season food crop production*. Special Alert. Food and Agriculture Organization of The United States. Available at <<http://www.fao.org/3/a-i7544e.pdf>>. Accessed 22 January 2019.

- Food and Agriculture Organization of the United Nations. 2017a. FAOSTAT: Democratic People's Republic of Korea. *FAO.org*. Available at <<http://www.fao.org/faostat/en/#country/116>>. Accessed 22 January 2019.
- Food and Agriculture Organization of the United Nations. 2017b. The State of Food Insecurity and Nutrition in the World. United Nations. Available at <<http://www.fao.org/3/a-I7695e.pdf-f#page=101>>. Accessed 22 January 2019.
- Ford, Lindsey. 2018. The 'Lippmann Gap' in Asia: Four Challenges to a Credible U.S. Strategy. *War on the Rocks*. Available at <<https://warontherocks.com/2018/12/the-lippmann-gap-in-asia-four-challenges-to-a-credible-u-s-strategy/>>. Accessed 22 January 2019.
- Gavi. 2017. Gavi country factsheet : The Democratic People's Republic of Korea. Available at <<https://www.gavi.org/country/dpr-korea/>>. Accessed 1 October 2018.
- Go, Myong-Hyun, and Ben Forney. 2018. *Kidnapping as Foreign Policy: North Korea's History of State Sponsored Abductions*. Available at <<http://en.asaninst.org/contents/kidnapping-as-foreign-policy-north-koreas-history-of-state-sponsored-abductions/>>. Accessed 1 October 2018.
- Grunow, Florian, and Niklaus Schiess. 2017. Exploring North Korea's Surveillance Technology. Available at <[https://www.ernw.de/download/exploring\\_north\\_koreas\\_surveillance\\_technology\\_troopers17.pdf](https://www.ernw.de/download/exploring_north_koreas_surveillance_technology_troopers17.pdf)>. Accessed 22 January 2019.
- Grunow, Florian, Niklaus Schiess, and Manuel Lubetzki. 2016. Woolim – Lifting the Fog on DPRK's Latest Tablet PC presented at the 33C3: works for me. Available at <[https://media.ccc.de/v/33c3-8143-woolim\\_lifting\\_the\\_fog\\_on\\_dprk\\_s\\_latest\\_tablet\\_pc#t=1903](https://media.ccc.de/v/33c3-8143-woolim_lifting_the_fog_on_dprk_s_latest_tablet_pc#t=1903)>. Accessed 27 August 2018.
- Hackett, James. 2018. *The Conventional Military Balance on the Korean Peninsula*. International Institute for Security Studies. Available at <<https://www.iiss.org/blogs/military-balance/2018/06/military-balance-korean-peninsula>>. Accessed 28 November 2018.
- Haggard, Stephan, and Marcus Noland. 2005. *Hunger and Human Rights: The Politics of Famine in North Korea*. U.S. Committee for Human Rights in North Korea. Available at <[https://www.hrnk.org/uploads/pdfs/Hunger\\_and\\_Human\\_Rights.pdf](https://www.hrnk.org/uploads/pdfs/Hunger_and_Human_Rights.pdf)>. Accessed 22 January 2019.
- Haggard, Stephan, and Marcus Noland. 2010. *Winter of their Discontent: Pyongyang attacks the Market*. Peterson Institute for International Economics Washington, DC.
- Hawk, David, and Amanda Mortwedt Oh. 2017. *The parallel gulag: North Korea's 'An-Jeon-Bu' prison camps*. Washington, DC: Committee for Human Rights in North Korea. Available at <[https://www.hrnk.org/uploads/pdfs/Hawk\\_The\\_Parallel\\_Gulag\\_Web.pdf](https://www.hrnk.org/uploads/pdfs/Hawk_The_Parallel_Gulag_Web.pdf)>. Accessed 19 December 2018.
- Hecker, Siegfried S., Robert L. Carlin, and Elliot A. Serbin. 2018. *FSI | CISAC - DPRK History*. Center for International Security and Cooperation, Stanford University. Available at <<https://cisac.fsi.stanford.edu/content/cisac-north-korea>>. Accessed 9 February 2019.
- Hudson, John, and David Francis. 2016. Why Did Sanctions Fail Against North Korea? *Foreign Policy*. Available at <<https://foreignpolicy.com/2016/09/09/why-did-sanctions-fail-against-north-korea/>>.

Accessed 22 January 2019.

- Human Rights Watch. 2018. "You Cry at Night but Don't Know Why:" Sexual Violence against Women in North Korea. Available at <<https://www.hrw.org/report/2018/11/01/you-cry-night-dont-know-why/sexual-violence-against-women-north-korea>>. Accessed 14 December 2018.
- International Crisis Group. 2018. *Time for a Modest Deal: How to Get U.S.-North Korean Talks Moving Forward*. Available at <<https://www.crisisgroup.org/asia/north-east-asia/korean-peninsula/b001-time-modest-deal-how-get-us-north-korean-talks-moving-forward>>. Accessed 17 December 2018.
- Jackson, Van. 2015. Alliance Military Strategy in the Shadow of North Korea's Nuclear Futures. U.S.-Korea Institute at SAIS. Available at <<http://38north.org/wp-content/uploads/2015/09/NKNF-Jackson-Alliance-09151.pdf>>.
- Jackson, Van. 2016. *Rival Reputations: Coercion and Credibility in US-North Korea Relations*. Cambridge: Cambridge University Press.
- Jackson, Van. 2018. Wagering on a Progressive versus Liberal Theory of National Security. *Texas National Security Review*. Available at <<https://tnsr.org/roundtable/policy-roundtable-the-future-of-progressive-foreign-policy/#intro>>. Accessed 16 December 2018.
- Jervis, Robert. 1984. *The illogic of American nuclear strategy*. Ithaca, N.Y: Cornell University Press.
- Jervis, Robert, and Mira Rapp-Hooper. 2018. Perception and Misperception on the Korean Peninsula. *Foreign Affairs*. Available at <<https://www.foreignaffairs.com/articles/north-korea/2018-04-05/perception-and-misperception-korean-peninsula>>. Accessed 6 September 2018.
- Ji, Dagyum. 2018. Sergey Lavrov meets Kim Jong Un in Pyongyang, invites him to Russia. *NKNews.org*. Available at <<https://www.nknews.org/2018/05/fm-lavrov-meets-with-north-korean-leader-invites-kim-to-russia/>>. Accessed 17 December 2018.
- Jun, Jenny, Scott LaFoy, and Ethan Sohn. 2015. *North Korea's Cyber Operations*. Center for Strategic and International Studies. Available at <<https://www.csis.org/analysis/north-korea%E2%80%99s-cyber-operations>>. Accessed 14 December 2018.
- KCNA. 2018a. Kim Jong Un's 2018 New Year's Address. *Korea Central News Agency*. Available at <<https://www.ncnk.org/node/1427>>. Accessed 30 May 2018.
- KCNA. 2018b. Third Plenary Meeting of Seventh C.C., WPK Held in Presence of Kim Jong Un. *Korea Central News Agency*. Available at <[https://www.ncnk.org/resources/publications/dprk\\_report\\_third\\_plenary\\_meeting\\_of\\_seventh\\_central\\_committee\\_of\\_wpk.pdf](https://www.ncnk.org/resources/publications/dprk_report_third_plenary_meeting_of_seventh_central_committee_of_wpk.pdf)>. Accessed 17 August 2018.
- Kerr, Paul K, Steven A Hildreth, and Mary Beth D Nikitin. 2016. *Iran-North Korea-Syria Ballistic Missile and Nuclear Cooperation*. Washington, D.C.: Congressional Research Service. Available at <<https://fas.org/gsp/crs/nuke/R43480.pdf>>. Accessed 22 January 2019.
- Kim, Hyun-Kyung, Elizabeth Philipp, and Hattie Chung. 2017. *North Korea's Biological Weapons Program*. Harvard Belfer Center. Available at <<https://www.belfercenter.org/sites/default/>>

- files/2017-10/NK%20Bioweapons%20final.pdf>. Accessed 22 January 2019.
- Klingner, Bruce. 2017. The Case Against Nukes in South Korea. *The Heritage Foundation*. Available at </asia/commentary/the-case-against-nukes-south-korea>. Accessed 28 November 2018.
- Korean Central News Agency. 2013. S. Korean Regime Denounced for Trying to Fabricate ‘Human Rights Resolution’ against DPRK. Archive. *Korean Central News Agency*. Available at <https://web.archive.org/web/20141012133700/http://www.kcna.co.jp/item/2013/201303/news26/20130326-12e.html>. Accessed 17 August 2018.
- Kretchun, Nat. 2017. The Regime Strikes Back: A New Era of North Korean Information Controls. *38 North*. Available at <https://www.38north.org/2017/06/nkretchun060917/>. Accessed 27 August 2018.
- Kretchun, Nat, and Jane Kim. 2012. *A quiet opening: North Koreans in a changing media environment*. InterMedia. Available at <https://www.intermedia.org/wp-content/uploads/2013/05/A\_Quiet\_Opening\_FINAL\_InterMedia.pdf>. Accessed 22 January 2019.
- Kristensen, Hans M., and Robert S. Norris. 2018. North Korean nuclear capabilities, 2018. *Bulletin of the Atomic Scientists* 74 (1): 41–51.
- Kube, Courtney, Ken Dilanian, and Carol E. Lee. 2018. CIA: North Korea won’t give up nukes, but might open a burger joint. *NBC News*. Available at <https://www.nbcnews.com/news/north-korea/cia-report-says-north-korea-won-t-denuclearize-might-open-n878201>. Accessed 30 August 2018.
- Lankov, Andrei. 2009. Pyongyang Strikes Back: North Korean Policies of 2002-08 and Attempts to Reverse” De-Stalinization from Below”. *asia policy* 8 (1): 47–72.
- Lankov, Andrei. 2016. *The Resurgence of a Market Economy in North Korea*. Carnegie Moscow Center. Available at <https://carnegieendowment.org/files/CP\_Lankov\_Eng\_web\_final.pdf>.
- Lankov, Andrei, Peter Ward, Ho-yeol Yoo, and Ji-young Kim. 2017. Making Money in the State: North Korea’s Pseudo-state Enterprises in the Early 2000s. MAKING MONEY IN THE STATE: NORTH KOREA’S PSEUDO-STATE ENTERPRISES IN THE EARLY 2000s. *Journal of East Asian Studies* 17 (1): 51–67.
- Lawrence, Christopher. 2019. A Window Into Kim’s Nuclear Intentions? A Closer Look at North Korea’s Yongbyon Offer. *War on the Rocks*. Available at <https://warontherocks.com/2019/01/a-window-into-kims-nuclear-intentions-a-closer-look-at-north-koreas-yongbyon-offer/>. Accessed 22 January 2019.
- Lee, Hyeonsoo. 2018. Creating a United, and Welcoming, Korea. *The New York Times*, sec. Opinion. Available at <https://www.nytimes.com/2018/12/03/opinion/korea-hyeonsoo-lee.html>. Accessed 10 December 2018.
- Lewis, Jeffrey. 2018. Has Singapore Led to Real Gains on the North Korean Nuclear Question? *GlobalAsia*. Available at <https://www.globalasia.org/v13no4/cover/has-singapore-led-to-real-gains-on-the-north-korean-nuclear-question\_jeffrey-lewis>.

- Long, Austin. 2017. The Rorschach Test of New Nuclear Powers: Analogies for North Korean Command and Control. *War on the Rocks*. Available at <<https://warontherocks.com/2017/10/the-rorschach-test-of-new-nuclear-powers-analogies-for-north-korean-command-and-control/>>. Accessed 19 December 2018.
- MacDonald, Hamish. 2018. Chinese upgrading infrastructure along border with North Korea: satellite imagery. *NK PRO*. Available at <<https://www.nknews.org/pro/chinese-upgrading-infrastructure-along-border-with-north-korea-satellite-imagery/>>. Accessed 17 December 2018.
- Magsamen, Kelly. 2018. North Korea Requires Deterrence and Containment, Not Bombing. *Texas National Security Review*. Available at <<https://tnsr.org/roundtable/policy-roundtable-good-choices-comes-north-korea/>>. Accessed 4 January 2019.
- Magsamen, Kelly, Melanie Hart, Michael Fuchs, and Vikram Singh. 2017. *A Responsible Approach to North Korea*. Center for American Progress. Available at <<https://cdn.americanprogress.org/content/uploads/2017/11/02053708/NorthKorea-brief1.pdf>>. Accessed 22 January 2019.
- Malinowski, Tom. 2017. How to Take Down Kim Jong Un. *Politico*. Available at <<https://www.politico.com/magazine/story/2017/07/24/how-to-take-down-kim-jong-un-215411>>. Accessed 30 August 2018.
- Manyin, Mark, and Mary Beth Nikitin. 2014. *Foreign Assistance to North Korea*. Washington, D.C.: Congressional Research Service. Available at <<https://fas.org/sgp/crs/row/R40095.pdf>>. Accessed 22 January 2019.
- Manzo, Vince A., and John K. Warden. 2017. Want to Avoid Nuclear War? Reject Mutual Vulnerability with North Korea. *War on the Rocks*. Available at <<https://warontherocks.com/2017/08/want-to-avoid-nuclear-war-reject-mutual-vulnerability-with-north-korea/>>. Accessed 30 August 2018.
- Moon, Jae-in. 2018. Congratulatory Remarks by President Moon Jae-in on 2018 Human Rights Day. Available at <<https://english1.president.go.kr/BriefingSpeeches/Speeches/101>>. Accessed 11 December 2018.
- Moon, Jae-in, and Jong-un Kim. 2018. Pyongyang Joint Declaration. Available at <<https://www.ncnk.org/node/1633>>. Accessed 15 December 2018.
- Moon, Katharine H.S. 2019. Commentary: To denuclearize N. Korea, Trump should think small. *Reuters*. Available at <<https://www.reuters.com/article/us-moon-korea-commentary-idUSKC-N1OX1L4>>. Accessed 4 January 2019.
- Morrison, Stephen J., Victor Cha, Rebecca Hersman, and Kee B. Park. 2018. *The Gathering Health Storm Inside North Korea*. Center for Strategic and International Studies. Available at <<https://www.csis.org/analysis/gathering-health-storm-inside-north-korea>>. Accessed 27 August 2018.
- Mount, Adam. 2017. How China Sees North Korea. *The Atlantic*. Available at <<https://www.theatlantic.com/international/archive/2017/08/china-military-strength-north-korea-crisis/538344/>>. Accessed 29 November 2018.

- Mount, Adam. 2018. Managing a Nuclear-Armed North Korea: Deter, Contain, Constrain, Transform. In *Policy Roundtable: Are There any Good Choices When it Comes to North Korea?* Texas National Security Review. Available at <<https://tnsr.org/roundtable/policy-roundtable-good-choices-comes-north-korea/>>. Accessed 31 August 2018.
- Mullen, Mike, Sam Nunn, and Adam Mount. 2016. *A Sharper Choice on North Korea: Engaging China for a Stable Northeast Asia*. CFR Independent Task Force No. 74. Council on Foreign Relations. Available at <<https://www.cfr.org/report/sharper-choice-north-korea>>.
- Nakashima, Ellen, and Joby Warrick. 2018a. North Korea working to conceal key aspects of its nuclear program, U.S. officials say. *Washington Post*. Available at <[https://www.washingtonpost.com/world/national-security/north-korea-working-to-conceal-key-aspects-of-its-nuclear-program-us-officials-say/2018/06/30/deba64fa-7c82-11e8-93cc-6d3becdd7a3\\_story.html](https://www.washingtonpost.com/world/national-security/north-korea-working-to-conceal-key-aspects-of-its-nuclear-program-us-officials-say/2018/06/30/deba64fa-7c82-11e8-93cc-6d3becdd7a3_story.html)>. Accessed 30 August 2018.
- Nakashima, Ellen, and Joby Warrick. 2018b. U.S. spy agencies: North Korea is working on new missiles. *Washington Post*. Available at <[https://www.washingtonpost.com/world/national-security/us-spy-agencies-north-korea-is-working-on-new-missiles/2018/07/30/b3542696-940d-11e8-a679-b09212fb69c2\\_story.html](https://www.washingtonpost.com/world/national-security/us-spy-agencies-north-korea-is-working-on-new-missiles/2018/07/30/b3542696-940d-11e8-a679-b09212fb69c2_story.html)>. Accessed 27 August 2018.
- Narang, Vipin, and Ankit Panda. 2018. North Korea Is a Nuclear Power. Get Used to It. *The New York Times*, sec. Opinion. Available at <<https://www.nytimes.com/2018/06/12/opinion/trump-kim-summit-denuclearization-north-korea.html>>. Accessed 30 August 2018.
- Narang, Vipin, and Ankit Panda. 2017. War of the Words: North Korea, Trump, and Strategic Stability. *War on the Rocks*. Available at <<https://warontherocks.com/2017/08/war-of-the-words-north-korea-trump-and-strategic-stability/>>. Accessed 6 September 2018.
- NATO. 2009. Operation OCEAN SHIELD. *Allied Maritime Command*. Available at <<https://mc.nato.int/missions/operation-ocean-shield.aspx>>. Accessed 22 January 2019.
- Nautilus-CSIS Working Group. 2002. *Conventional Arms Control on the Korean Peninsula*. Nautilus and Center for Strategic and International Studies. Available at <<http://oldsite.nautilus.org/DPRK-BriefingBook/conventionalweapons/CSISConventionalArmsControl.pdf>>. Accessed 22 January 2019.
- Office of the Secretary of Defense. 2018. Military and Security Developments Involving the Democratic People's Republic of Korea 2017: 32.
- O'Hanlon, Michael. 2018. A Better Way to Prepare for War in Korea. *Wall Street Journal*, sec. Opinion. Available at <<https://www.wsj.com/articles/a-better-way-to-prepare-for-war-in-korea-1536098834>>. Accessed 6 September 2018.
- O'Neil, Andrew. 2007. Can A Nuclear-Armed North Korea Be Managed? In *Nuclear Proliferation in Northeast Asia*, 57–78. Palgrave Macmillan, New York. Available at <[https://link.springer.com/chapter/10.1057/9780230607071\\_4](https://link.springer.com/chapter/10.1057/9780230607071_4)>. Accessed 16 August 2018.
- Pak, Jung H., Sue Mi Terry, and Bruce Klingner. 2018. Ex-CIA analysts explain why a bloody nose

- policy on North Korea would backfire. *USA Today*. Available at <<https://www.usatoday.com/story/opinion/2018/02/09/korea-olympics-close-war-first-strike-disaster-jung-pak-sue-terry-bruce-klinger-column/319072002/>>. Accessed 17 December 2018.
- Panda, Ankit. 2018. The Right Way to Manage a Nuclear North Korea. *Foreign Affairs*. Available at <<https://www.foreignaffairs.com/articles/north-korea/2018-11-19/right-way-manage-nuclear-north-korea>>. Accessed 14 December 2018.
- Park, In Ho. 2017. *The Creation of the North Korean Market System*. Seoul: Daily NK. Available at <<https://www.dailynk.com/english/database/?uid=68&mod=document&pageid=1>>.
- Park, John, and Jim Walsh. 2016. *Stopping North Korea, Inc.: Sanctions Effectiveness and Unintended Consequences*. Massachusetts Institute of Technology. Available at <<https://www.belfercenter.org/sites/default/files/legacy/files/Stopping%20North%20Korea%20Inc%20Park%20and%20Walsh%20.pdf>>.
- Park, Kee B., and Eliana Kim. 2018. The Case for Funding the UN's Request for Humanitarian Assistance to the DPRK. *38 North*. Available at <<https://www.38north.org/2018/10/kparkekim102318/>>. Accessed 11 December 2018.
- Park, Kyung-Ae. 2011. Economic crisis, women's changing economic roles, and their implications for women's status in North Korea. *The Pacific Review* 24 (2): 159–177.
- Plant, Thomas, and Ben Rhode. 2013. China, North Korea and the Spread of Nuclear Weapons. *Survival* 55 (2): 61–80.
- Pompeo, Mike. 2018. Press Availability with Korean Foreign Minister Kang Kyung-wha and Japanese Foreign Minister Taro Kono. *US Department of State*. Available at <<https://www.state.gov/secretary/remarks/2018/06/283213.htm>>. Accessed 22 January 2019.
- Rapp-Hooper, Mira. 2017. America Is Not Going to Denuclearize North Korea. *The Atlantic*. Available at <<https://www.theatlantic.com/international/archive/2017/11/north-korea-icbm-kim-trump-nuclear/547040/>>. Accessed 30 August 2018.
- Reuters. 2018. China first-quarter imports from North Korea fall 87 percent year-on-year in yuan terms. *Reuters*. Available at <<https://www.reuters.com/article/us-china-trade-northkorea/china-first-quarter-imports-from-north-korea-fall-87-percent-year-on-year-in-yuan-terms-idUSKBN1HU0BL>>. Accessed 17 December 2018.
- Rice, Susan E. 2018. It's Not Too Late on North Korea. *The New York Times*. Available at <<https://www.nytimes.com/2017/08/10/opinion/susan-rice-trump-north-korea.html>>. Accessed 30 August 2018.
- Scarlatoiu, Greg. 2015. *North Korea's Forced Labor Enterprise: A State-Sponsored Marketplace in Human Trafficking*. Available at <[https://humanrightscommission.house.gov/sites/humanrightscommission.house.gov/files/wysiwyg\\_uploaded/Testimony%20Greg%20Scarlatoiu.pdf](https://humanrightscommission.house.gov/sites/humanrightscommission.house.gov/files/wysiwyg_uploaded/Testimony%20Greg%20Scarlatoiu.pdf)>. Accessed 12 December 2018.
- Shiffrin, Joshua. 2018. Learning to Love Kim's Bomb. *Foreign Affairs*. Available at <<https://www.for>

- eignaffairs.com/articles/north-korea/2018-10-03/learning-love-kims-bomb>. Accessed 2 February 2019.
- Shin, Hyonhee. 2018. As food crisis threatens, humanitarian aid for North Korea grinds to a halt. *Reuters*. Available at <<https://www.reuters.com/article/us-northkorea-usa-aid-insight/as-food-crisis-threatens-humanitarian-aid-for-north-korea-grinds-to-a-halt-idUSKCN1L529H>>. Accessed 10 September 2018.
- Snyder, Glenn H. 1961. *Deterrence and Defense*. Princeton University Press. Available at <<http://www.jstor.org/stable/j.ctt183pj49>>. Accessed 2 May 2018.
- Talley, Ian, and Anatoly Kurmanaev. 2018. Thousands of North Korean Workers Enter Russia Despite U.N. Ban. *The Wall Street Journal*. Available at <<https://www.wsj.com/articles/russia-is-issuing-north-korean-work-permits-despite-u-n-ban-1533216752>>. Accessed 22 January 2019.
- Taylor, Adam. 2017. North Korea appears to have a new Internet connection — thanks to the help of a state-owned Russian firm. *The Washington Post*, sec. World Views. Available at <[https://www.washingtonpost.com/news/worldviews/wp/2017/10/02/north-korea-appears-to-have-a-new-internet-connection-thanks-to-the-help-of-a-state-owned-russian-firm/?utm\\_term=.86670e9db698](https://www.washingtonpost.com/news/worldviews/wp/2017/10/02/north-korea-appears-to-have-a-new-internet-connection-thanks-to-the-help-of-a-state-owned-russian-firm/?utm_term=.86670e9db698)>. Accessed 22 January 2019.
- Transitional Justice Working Group. 2017. *Mapping Crimes Against Humanity in North Korea*. Seoul. Available at <[https://en.tjwg.org/TJWG\\_Report-Mapping\\_Crimes\\_Against\\_Humanity\\_in\\_North\\_Korea\(July2017\)-Eng\\_Final.pdf](https://en.tjwg.org/TJWG_Report-Mapping_Crimes_Against_Humanity_in_North_Korea(July2017)-Eng_Final.pdf)>. Accessed 19 December 2018.
- UN Commission of Inquiry on Human Rights in the Democratic People's Republic of Korea. 2014. *Report of the Commission of Inquiry on Human Rights in the Democratic People's Republic of Korea*. United Nations Human Rights Council. Available at <<https://documents-dds-ny.un.org/doc/UNDOC/GEN/G14/108/66/PDF/G1410866.pdf?OpenElement>>. Accessed 22 January 2019.
- UN General Assembly. 2002. *Rome Statute of the International Criminal Court*. Vol. A/CONF.183/9. Available at <[https://www.icc-cpi.int/nr/rdonlyres/ea9aef7-5752-4f84-be94-0a655eb30e16/0/rome\\_statute\\_english.pdf](https://www.icc-cpi.int/nr/rdonlyres/ea9aef7-5752-4f84-be94-0a655eb30e16/0/rome_statute_english.pdf)>. Accessed 28 November 2018.
- UN Human Rights Council. 2017. *Report of the Special Rapporteur on the rights of persons with disabilities on her visit to the Democratic People's Republic of Korea*. United Nations. Available at <<https://documents-dds-ny.un.org/doc/UNDOC/GEN/G17/358/55/PDF/G1735855.pdf?OpenElement>>. Accessed 22 January 2019.
- UN Office for the Coordination of Humanitarian Affairs. 2018. *2018 DPR Korea Needs and Priorities*. Available at <[http://kp.one.un.org/content/dam/unct/dprk/docs/unct\\_kp\\_NP2018.pdf#page=10](http://kp.one.un.org/content/dam/unct/dprk/docs/unct_kp_NP2018.pdf#page=10)>. Accessed 22 January 2019.
- UN Panel of Experts. 2018. *Final report of the Panel of Experts established pursuant to resolution 1874 (2009)*. Available at <[http://www.un.org/ga/search/view\\_doc.asp?symbol=S/2018/171/Corr.1](http://www.un.org/ga/search/view_doc.asp?symbol=S/2018/171/Corr.1)>. Accessed 26 December 2018.
- UNICEF. 2017. *2017 DPRK Korea Multiple Indicator Cluster Survey*. UNICEF. Available at <<https://>>



- www.unicef.org/dprk/sites/unicef.org/dprk/files/2018-06/2017%20DPRK%20MICS%20Survey%20Findings%20Report\_July%202018\_0.pdf>. Accessed 19 December 2018.
- United Nations General Assembly. 2012. *Resolution adopted by the General Assembly on 10 September 2012*. Available at <[http://www.un.org/en/ga/search/view\\_doc.asp?symbol=A/RES/66/290](http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/66/290)>.
- United Nations Secretary-General. 2017. *Situation of human rights in the Democratic People's Republic of Korea*. Available at <<https://reliefweb.int/sites/reliefweb.int/files/resources/N1724309.pdf>>. Accessed 22 January 2019.
- United Nations Security Council. 2017. *UNSCR 2397*. Available at <[https://undocs.org/S/RES/2397\(2017\)](https://undocs.org/S/RES/2397(2017))>. Accessed 22 January 2019.
- U.S. Department of State. 2017. *World Military Expenditures and Arms Transfers 2017*. U.S. Department of State. Available at <<https://www.state.gov/t/avc/rls/rpt/wmeat/2017/index.htm>>. Accessed 22 January 2019.
- Varriale, Christina. 2018. North Korea's Other Weapons of Mass Destruction | Arms Control Association. *Arms Control Today*. Available at <<https://www.armscontrol.org/act/2018-09/features/north-koreas-other-weapons-mass-destruction>>. Accessed 17 December 2018.
- Warden, John K., and Ankit Panda. 2019. Goals for any arms control proposal with North Korea. *Bulletin of the Atomic Scientists*. Available at <<https://thebulletin.org/2019/02/goals-for-any-arms-control-proposal-with-north-korea/>>. Accessed 18 February 2019.
- Warrick, Joby, Ellen Nakashima, and Anna Fifield. 2017. North Korea now making missile-ready nuclear weapons, U.S. analysts say. *Washington Post*. Available at <[https://www.washingtonpost.com/world/national-security/north-korea-now-making-missile-ready-nuclear-weapons-us-analysts-say/2017/08/08/e14b882a-7b6b-11e7-9d08-b79f191668ed\\_story.html](https://www.washingtonpost.com/world/national-security/north-korea-now-making-missile-ready-nuclear-weapons-us-analysts-say/2017/08/08/e14b882a-7b6b-11e7-9d08-b79f191668ed_story.html)>. Accessed 15 January 2019.
- Wertz, Daniel. 2018. How to Use Sanctions as a Lever, Not Just a Hammer: A Proposal for Phased Sanctions Relief. Available at <<https://www.38north.org/2018/06/dwertz060818/>>. Accessed 28 August 2018.
- Wit, Joel. 2017. Back Channel to North Korea. *The Atlantic*. Available at <<https://www.theatlantic.com/international/archive/2017/08/back-channel-to-north-korea/536721/>>. Accessed 22 January 2019.
- Wit, Joel, and William McKinney. 2017. Is There Still Time for Diplomacy With North Korea? *The National Interest*. Available at <<https://nationalinterest.org/feature/there-still-time-diplomacy-north-korea-21442>>. Accessed 6 September 2018.
- Wolfsthal, Jon B. 2017. Give Up on Denuclearizing North Korea. *The Atlantic*. Available at <[https://www.theatlantic.com/international/archive/2017/07/give-up-on-denuclearizing-north-korea/535347/?utm\\_source=atltw](https://www.theatlantic.com/international/archive/2017/07/give-up-on-denuclearizing-north-korea/535347/?utm_source=atltw)>. Accessed 30 August 2018.
- World Food Programme. 2018. *World Food Programme Democratic Republic of Korea Country Brief*. UN

World Food Programme. Available at <[https://docs.wfp.org/api/documents/WFP-0000073351/download/?\\_ga=2.103702656.1648813364.1535089886-176670398.1535089886](https://docs.wfp.org/api/documents/WFP-0000073351/download/?_ga=2.103702656.1648813364.1535089886-176670398.1535089886)>. Accessed 19 December 2018.

World Health Organization. 2015. Democratic People's Republic of Korea: WHO statistical profile. World Health Organization. Available at <<https://www.who.int/gho/countries/prk.pdf#page=3>>. Accessed 19 December 2018.

Yang, Heekyong, and James Pearson. 2017. Factbox: Countries which have expelled North Korean ambassadors after nuclear test. *Reuters*. Available at <<https://www.reuters.com/article/us-north-korea-missiles-diplomacy-factbox/factbox-countries-which-have-expelled-north-korean-ambassadors-after-nuclear-test-idUSKCN1BU0ED>>. Accessed 22 January 2019.

Yang, Un-Chul. 2018. The Ongoing Contest Between the Plan and Market in North Korea. In *Whither North Korea?*, edited by Un-Chul Yang. Seongnam City: The Sejong Institute.

Zakharova, Liudmila. 2016. *Russia-North Korea Economic Relations*. Korea Economic Institute. Available at <[http://keia.org/sites/default/files/publications/joint\\_us-korea\\_2016\\_-\\_russia\\_nk.pdf](http://keia.org/sites/default/files/publications/joint_us-korea_2016_-_russia_nk.pdf)>. Accessed 22 January 2019.



The FAS International Study Group on North Korea Policy is a group of fourteen experts from the United States, South Korea, Japan, Canada, and the UK who convened to develop a consensus strategy toward a North Korea that will remain nuclear armed for the next two decades. The group warns that the unrealistic fixation on complete and immediate disarmament will not only distract from but also exacerbate a range of challenges to critical U.S. and allied interests. Without a major shift in strategy, North Korea will expand its ability to threaten its neighbors, conduct illicit activities around the world, and repress its population with impunity.

In this report, the study group issues recommendations to the United States and its allies to not only manage a nuclear-armed North Korea, but to shape its transformation over time, including by: establishing and maintaining stability through ongoing arms control and steadily pursuing nuclear disarmament as a long-term objective; preparing a flexible sanctions regime and a procedure to administer economic investment projects; advancing the welfare of the North Korean people; and renovating diplomatic instruments necessary to accomplish these tasks successfully.

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