



RUSSIA AND CRISIS MANAGEMENT ON THE KOREAN PENINSULA



FOREIGN POLICY RESEARCH INSTITUTE
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EXECUTIVE SUMMARY

Rensselaer Lee & William Severe

This report argues that the United States should attempt to engage the Russian Federation as a potential broker of negotiations over Democratic People's Republic of Korea's nuclear and missile programs. Russia's ascension to a more prominent role in North Korean affairs is long overdue and could add some heft to the international community's negotiating position vis-à-vis Pyongyang.

The policy of economic sanctions on North Korea, while important in pressuring Pyongyang, has proven insufficient in coercing the country to restrain or relinquish its nuclear and missile programs. The new round of sanctions approved via United Nations Resolution 2371 is unlikely to change North Korea's economic situation or its political calculus substantially. Pyongyang is skillful at evading sanctions via shell companies and Chinese intermediaries. Equally, not all parties to the sanctions, most notably China, have demonstrated the level of commitment required to implement an airtight sanctions regime.

Though China has backed a nuclear-free Korean peninsula and has signed up for international sanctions, its support for harsh penalties has been halting and unenthusiastic. In contrast to the United States, Japan, and South Korea, Beijing does not feel directly threatened by North Korea's nuclear program. China is more worried about North Korean weakness than strength, fearing a large migrant influx into northeast China if the Kim regime collapses.

The United States should consider the constructive role Russia could play in defusing the North's nuclear and missile ambitions. Russia's close ties with North Korea date back half a century. Its economic ties are less significant than those between North Korea and China, but Russia believes it would reap diplomatic and economic benefits if it helped resolve the Korean dispute. Indeed, Russian President Vladimir Putin has significantly increased his visibility in Korean diplomacy over the past two months, striking a position between that of Pyongyang and Washington. Moscow clearly wants to play a role in defusing the crisis, not only because it opposes Trump's threat of military action against North Korea, but also because brokering a deal would boost Russia's international status. Washington could use Russia's interest in deal making to help set the foundations for the long-term resolution of the North Korean crisis.

Russia could coordinate its sources of influence and leverage with those of other regional players, especially China and (somewhere down the line) the United States. Though Russia and China have somewhat different interests in the Korean peninsula, they might be able to agree on both a common set of principles and a common strategy for managing the North Korean nuclear issue. Faced with such a "united front" and unable to play the two countries against each other or to count on Moscow's continued friendship, Pyongyang might begin to rethink its nuclear weapons policy. The United States has historically placed too much hope on China's ability or willingness to restrain North Korea, while ignoring Russia's influence. Engaging Russia over North Korea could help bring Pyongyang to the negotiating table.

PREFACE

This research project, launched in 2016, examines the current state of Russia-North Korea relations. It examines Russian interests in the Democratic People's Republic of Korea (DPRK), focusing on Russia's points of diplomatic and economic leverage and its potential role in defusing the ongoing nuclear crisis on the Korean peninsula. North Korea has historically sought to build its relationship with Russia as a means of balancing China. In addition, the project also explores how Russian diplomats and analysts view North Korea's domestic politics, its nuclear and missile capabilities, and its foreign policy priorities. The project has been conducted as collaboration between researchers from the Foreign Policy Research Institute, Far Eastern Federal University in Vladivostok, Moscow State Institute of International Relations, and the Russian Academy of Sciences' Institute of Far Eastern Studies in Moscow.

Our assigned task in this project was to examine recent trends in Russia-North Korea relations, focusing on Russia's role in managing and (potentially) resolving the Korean nuclear crisis. Russian channels of access and influence in North Korea are quite extensive. They reflect Russia's long history and on-the-ground experience in the North, including valuable economic, political, and diplomatic support it has provided the Kim dynasty over the years. We didn't find much evidence of direct Russian influence on Pyongyang's nuclear decision-making, but we believe that such influence may lie in a different direction: as a mediator of the crisis. Russia is a sufficiently powerful player on the Korean peninsula to engineer a diplomatic opening for engaging the North, and perhaps to guide the respective interested parties toward some sort of agreement—assuming that a negotiated solution is still possible, which no one can predict.

Security relations on the Korean peninsula have deteriorated significantly in recent months, as Pyongyang crosses new frontiers in weapons development, testing long-range missiles that could reach across the Pacific Ocean as well as a powerful nuclear device with an estimated 17 times the explosive power of the bomb dropped on Hiroshima in 1945. America has put major military hardware in the region, mainly warships and warplanes (including nuclear-capable bombers) to curb the North's aggressive behavior. An inflammatory war of words between the countries' leaders is raising the threat level in the region. In a September 2017 speech to the United Nations, President Donald Trump promised to “totally destroy” North Korea if necessary to defend the United States and its allies, whereupon Kim Jong-un responded by calling Trump a “mentally deranged U.S. dotard.”

Against this unfavorable background of the two countries almost at sword points, in October 2017, U.S. Secretary of State Rex Tillerson made a promising overture to open direct talks with North Korea over its ever more unnerving nuclear and ballistic missile tests. The immediate objective was to avert what many U.S. officials feared was the significant risk of military confrontation between the sides. However, Tillerson made clear that the ultimate goal of negotiations would be complete denuclearization, a forlorn hope perhaps, since the North has shown no interest in denuclearization. Tillerson may have calculated that talks on threat reduction could provide

a diplomatic platform for a broader discussion of nuclear containment issues. Yet, Tillerson's initiative was shot down by Trump, who reportedly told the Secretary that he was "wasting his time trying to negotiate with little rocket man" and that the timing was wrong in any case. Trump has since then called on Pyongyang to come to the table and make a deal. But if the sides can't agree on a concept of denuclearization, the talks are unlikely to make much progress.¹

Finally, there is the issue of trust—a commodity in short supply in the U.S.-North Korea relationship. The issue came to the fore with Donald Trump's decision on October 13 to "disavow the landmark 2015 nuclear agreement with Iran, negotiated internationally by the United States and five other countries." Trump called the deal "one of the worst and most one-sided transactions" the United States has ever entered into, mainly because it allowed restrictions on Tehran's nuclear weapons development to expire after a defined period (10 to 15 years). Trump has kicked the deal over to Congress, demanding changes, and its fate is now up in the air. Whatever the justification, Trump's decision certainly would reinforce the North's belief that Western promises and guarantees cannot be relied upon and that its nuclear stockpile is the ultimate determinate of national survival.

If, despite present odds, the United States does manage to enter into a dialogue or negotiations with North Korea, it's hard to know what sort of path(s) to pursue. What Western proposals would strike the right notes with Pyongyang's leaders? North Korea may be practically impervious to economic sanctions, so lifting them might not have much of an impact. Our Russian colleagues argue that even a total trade embargo imposed by Russia and China (which account for nearly all of the DPRK's foreign trade) wouldn't change Pyongyang's calculus much. As Russian President Vladimir Putin recently remarked, they would "rather eat grass" than abandon their nuclear arms.² Yet, even positive inducements—combinations of economic and diplomatic benefits and security assurances—wouldn't make much of a difference either, according to recent talks with North Korean representatives by former U.S. intelligence officials. The underlying point is that the North Koreans simply don't trust Western promises or guarantees. North Koreans are fond of citing the examples of Muammar Gaddafi and Saddam Hussein, who wouldn't have suffered such dismal fates, had their countries possessed nuclear weapons—a contention that's hard to argue with.³

Affecting the North's stance on nuclear weapons is its extremely unpromising relationships with enemies close at hand and with the outside world generally. Here, a comparison with South Africa's denuclearization experience is instructive. South Africa is the only country in the world to have dismantled its nuclear weapons program after having already built a number of weapons. To make a long story short, South Africa's original decision to go nuclear in the 1970s was prompted by various external threats, especially by Soviet communist agitation and the presence of Cuban troops in Angola. Yet, by the late 1980s, the government had concluded peace settlements with Angola and Namibia; and with the USSR, in its death throes and unable to spread communism, South Africa's security environment had improved markedly. The government thus decided to end its nuclear weapons program, which it did in 1990.⁴ The contrast with North Korea's current situation is stark and quite depressing. The North faces three determined enemies, in order of importance the United States, South Korea, and Japan, all of which would like to hasten the end of the Kim regime, albeit mainly by coercive economic means. Moreover, Korea is a divided country, and most reunification scenarios envisage absorption of the North by the vastly richer, more dynamic, and more populous South—not a very good survival prospect for the Kim dynasty

1 Michael C. Bender and Nancy A. Youssef, "Trump's North Korea Shift," *Wall Street Journal*, November 8, 2017, p. 1.

2 Artyom Lukin and Liudmila Zakharova, "Russia-North Korea Economic Ties: Is there more than meets the eye?" *FPRI E-Notes*, October 6, 2017.

3 Bruce Klinger and Sue Mi Terry, "We participated in Talks with North Korean representatives. This is what we learned," *Washington Post*, June 22, 2017.

4 For more information South Africa's nuclear program, see Appendix A.

Does this all mean that the United States and North Korea are on the road to war? We hope that both sides are sufficiently cognizant of the risks of a major conflict not to initiate something drastic, though the possibility of a miscalculation cannot be ruled out. In any case, the sides need to start talking—and soon. The United States should display firmness and patience in dealing with the North. It should expect a dialogue or negotiations to be open-ended, lasting perhaps for several years, during which time the North would retain at least some of its nuclear arsenal. We believe that neither the Pyongyang regime nor the people it rules can maintain the present course of nuclear militarization and missile provocations indefinitely and that wiser heads will recognize the need to put North Korea on a path to sustainable development—lest the country implode from within. Time is not on North Korea’s side—and again patience, willingness to talk, and openness to some of the North’s major concerns can do much to stabilize the increasingly dangerous situation on the Korean peninsula.

Finally, we see a convergence of aims between the United States and Russia (though from different perspectives) on the Korean nuclear issue. Of course, Moscow will be much more successful in reaching out to Pyongyang than Washington has been; in fact, Russia has much better relations with the North than any other country of consequence. Given that existing policies haven’t changed Pyongyang’s calculus or behavior, we favor engaging Russia as a potential broker of negotiations over the North’s nuclear and ballistic missile programs. Once a forgotten player in the Korean nuclear drama, Russia today is becoming indispensable for orchestrating a diplomatic process that could lead eventually to a solution to the current crisis—a reality that should rank high on the agendas of both states’ leaders. U.S.-Russia cooperation on the North Korean front conceivably could be one of the building blocks over which the two countries could improve relations overall—a hopeful projection, if hardly definitive.⁵

⁵ On this point, see also, Artyom Lukin and Georgy Toloraya, “Can Russia Play a Role in Resolving the Korean Crisis?” in *Nuclear Weapons and Russian North Korean Relations*, Foreign Policy Research Institute.

AN ESCALATING WAR OF WORDS

“If forced to defend itself or its allies, **we will have no choice but to totally destroy North Korea.**”
~ President Donald Trump, *Speech at the UN, September 19, 2017*

“It could be the most powerful detonation of an H-bomb in the Pacific.”
~ North Korean Foreign Minister Ri Yong-ho, *in New York, September 21, 2017*

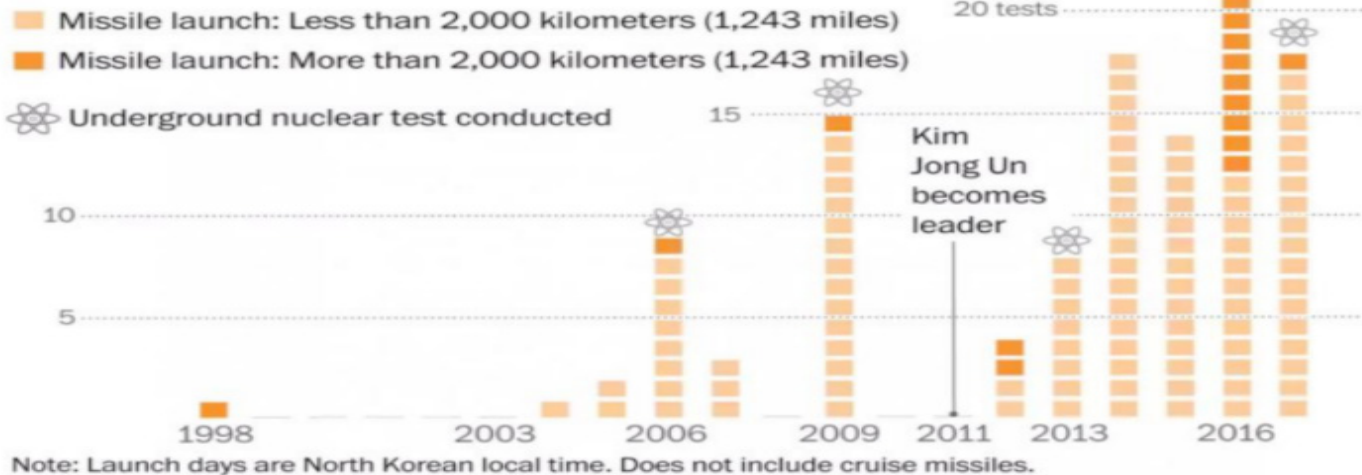
North Korea “will consider with seriousness exercising of a corresponding **highest level of hardline countermeasure in history.**”
~ Kim Jong-un’s response to Trump, *September 22, 2017*

Security conditions are deteriorating rapidly on the Korean peninsula. The international powers’ efforts to resolve the North Korean nuclear crisis have come to naught. Despite, or perhaps because of, economic sanctions, now coupled with very thinly veiled U.S. threats of preemptive military action, the Democratic People’s Republic of Korea (DPRK, North Korea) has shown no inclination to change the course of its nuclear weapons and ballistic missile policies. The North is believed to be adding to its nuclear arsenal, though its fissile material stocks and the number of its weapons cannot be estimated with certainty (Most estimates of the North’s weapons are in the range of 20 to 30, but some run as high as 60.). North Korea’s nuclear tests in January and September 2016, and most recently in September 2017, of what the North claimed to be a miniaturized hydrogen bomb make a total of six tests since 2006. Initial estimates put the explosive yield at approximately 100-120 kilotons, five to twelve times that of the September 2016 test. Yet, much higher estimates have recently emerged:⁶ 160 kilotons by the Japanese Defense Ministry and “roughly” 250 kilotons in an analysis by *38 North* (a publication of the US-Korea Institute), more than double the previous estimates.⁷ Along with successful launches of intercontinental ballistic missiles (ICBMs) capable of reaching the continental United States on July 4 and July 28, 2017 (the latter missile reportedly capable of hitting the “lower 48”), these tests have brought home the alarming reality of predictions by U.S. government and private experts that North Korea could deliver a nuclear-armed missile to the United States in one to two years—even perhaps as early as next year. This development has added significant urgency to U.S. and international efforts to rein in Pyongyang. The figure below from the *Washington Post* clearly indicates the North’s increasing rate of progress in weapons development.

6 Frank Fabian, et al., “North Korea’s Punggye-ri Nuclear Test Site: Satellite Imagery Shows Post-Test Effects and New Activity in Alternate Tunnel Portal Areas,” *38 North*, September 12, 2017.

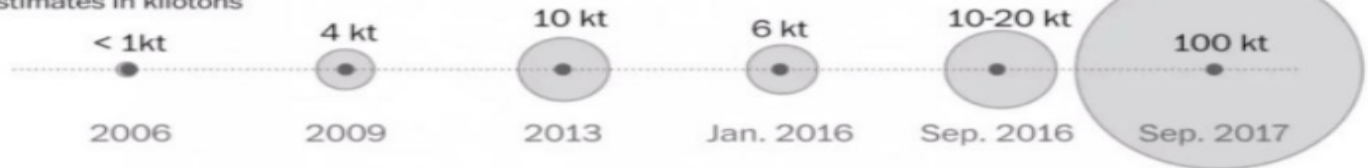
7 Michelle Ye Hee Lee, “Analysis N. Korea Bomb Test Was Larger Than Thought,” *Washington Post*, September 14, 2017.

North Korea missile launches and nuclear tests



Nuclear tests by yield

Estimates in kilotons



Source: CSIS Missile Defense Project, Nuclear Threat Initiative, University of Hamburg, Washington Post reports
THE WASHINGTON POST

To be sure, not everyone shares the U.S. consensus about the nature of the missile threat. For instance, the Defense Ministry of the Russian Federation maintains that both launches were not bonafide ICBMs, but rather a less consequential intermediate-range ballistic missile (IRBM)—one of many differences in the way in which the two powers perceive the North Korean problem. Also, a couple of German scientists and a U.S. MIT professor writing in the *Bulletin of the Atomic Scientists* maintain that the Hwasong rocket, which was used in the two tests, was a “sub-level” ICBM that would not be able to deliver a nuclear warhead to the lower 48 states and possibly not even over the shorter distance to Anchorage, Alaska. It is certainly possible that both North Korea and the United States are exaggerating the North’s near-term missile threat to the United States, but we will share the American consensus on this contentious issue for the purposes of this report.⁸

On August 8, 2017, the *Washington Post* broke an important story citing a Defense Intelligence Agency analysis that North Korea had produced a warhead small and compact enough to be carried over long distances. “The IC assesses North Korea has produced nuclear weapons for ballistic missile delivery, to include delivery by ICBM-class missiles,” read one U.S. assessment.⁹ A remaining technical question is whether the North can design a combat-capable ICBM system that could deliver a functioning nuclear device to a downrange target.

North Korea’s march forward, apparently unchecked, to develop a full-fledged nuclear capability is causing much heartburn in Washington policy circles and, increasingly, among the U.S. public. In response to these fears, the United States is ramping up its military presence on the Korean peninsula. Some talk up the possibility of a nuclear war on the peninsula or at least some kind of destructive clash between United States-Republic of Korea

⁸ Theodore A. Postol, “North Korea’s ‘Not Quite ICBM’ Can’t Hit the Lower 48 States,” *Bulletin of the Atomic Scientists*, August 11, 2017.

⁹ Joby Warrick, Ekken Nakashima, and Anna Freund, “North Korea Now Making Missile-Ready Nuclear Weapons, Analysts Say,” *Washington Post*, August 8, 2017. Some analysts question whether North Korea is actually able to produce a nuclear warhead.

(ROK) and North Korean forces. What can the United States and its partners do to halt this dangerous dynamic? More broadly, what can the powers do to resolve the Korean nuclear situation and bring a measure of peace and stability to the Korean peninsula?

America's immediate response to the July 28 missile launch was to ratchet up economic pressure on North Korea, hoping that this move might make Pyongyang see the error of its ways and agree to negotiate away its nuclear missile programs. Accordingly, on August 5, U.S. Ambassador to the United Nations Nikki Haley, resorting to a favorite U.S. policy tool, announced a new round of sanctions against North Korea, the eighth since that country's first nuclear test in 2006. The new measures (identified as Resolution 2371) were hailed as "the single largest economic package ever leveled against the North Korean regime" and were unprecedentedly harsh. Among other things, they banned outright exports of North Korea's three main commodities—coal, iron ore, and fish products—worth roughly \$1 billion a year, about one third of its total export revenues in 2015. It also barred countries from issuing new permits for Korean guest workers, who are an important source of revenue for the Kim regime.¹⁰ In other words, they were designed to take a huge bite out of the DPRK's economy and to threaten the leadership with potential economic ruin. The People's Republic of China (PRC) and Russia both signed on to the resolution though they had earlier promised not to agree to any additional sanctions against the DPRK. China reportedly even collaborated with the United States in drafting the new resolution. In fact, the vote on United Nations Security Council (UNSC) Resolution 2371 was unanimous, meaning that that Pyongyang would "see the international community standing with one voice," in Haley's words. But, she also said, "Yes we had to twist arms to get China, Russia aboard with North Korea sanctions"¹¹

Opinions differ on the efficacy of the new resolution. To some, it marked an important step forward in North Korean policy, one offering hope of drawing Pyongyang into negotiations and reshaping the nuclear landscape on the Korean peninsula. To others, it was just an extension of 11 years of failure to deal effectively with the North's weapons development programs. Ultimately, resolution of the issue will depend on how China—North Korea's neighbor, main trading partner, and main buyer of its fish, coal, and iron ore—chooses to play the new UN policy. Beijing has historically supported the goal of a non-nuclear North Korea, and it has made a point of roundly condemning the Kim regime's provocative behavior and calling for an end to missile tests and nuclear research programs. However, it worries about the effect of sanctions and other high pressure tactics on the stability of the regime, a vital buffer against U.S.-ROK forces to the south. For Beijing, the nuclear status quo in North Korea is a lesser evil than would be a failed or failing state (especially a nuclear state) on its doorstep. In any event, China's way of reconciling these imperatives has been to commit to UN resolutions on paper (even to participate in preparing them, as we have seen), while in practice implementing them selectively, sporadically, or not at all.¹² The same hedging strategy could well be used in responding to the much tougher August 5 resolution.

But even the 2371 sanctions were deemed insufficient to contain Pyongyang. In yet another roll of the dice, the Security Council introduced Resolution 2375 on September 11 following the North's sixth nuclear test nine days before. Among other provisions, new measures will cap North Korea's crude oil imports at around four million barrels (bbl.) per year (supposedly equivalent to what countries had exported to the DPRK the previous year) and its annual imports of refined petroleum products at two million bbl. It also prohibits the export of natural gas to the

10 By contrast, the immediately preceding resolutions, 2270 and 2321 of 2016, also prohibited exports of coal and iron ore, but allowed waivers for shipments for "peoples livelihood purposes"—a loophole big enough to drive a truck through. Those resolutions didn't touch fish products or guest workers.

11 Haley, "Yes we had to twist arms to get China, Russia on board with Korea sanctions," *Daily Caller* August 7, 2017.

12 This attitude infuriated China's American partners at the end of July. Trump said, "I'm very disappointed with China. Our foolish leaders have allowed them to make hundreds of billions of dollars a year in trade, yet they do nothing for us with North Korea, just talk," *CBS News*, July 30, 2017. In August, Trump began pressuring China over theft of trade secrets, patents, and licenses from U.S. firms, again trying to elicit a stronger response from China on North Korea.

DPRK entirely. The resolution also banned exports of textiles, a major money earner worth \$726 million per year, meaning that about 60 percent of the DPRK's foreign revenues would be wiped out. In addition, the resolution prohibited issuance of new work contracts to North Koreans (Contracts prior to the resolution were not affected, except when they expired, and the workers are supposed to be sent home.). China and Russia went along with the new sanctions, but only after watering down U.S. demands, which include a total embargo on crude oil imports and an outright ban on contracts with guest workers. But Russian President Vladimir Putin reportedly has refused to support the restrictions on fuel exports to North Korea, which he describes as pushing the North "to a dead end road."¹³ Coincidentally, lively gray area traffic in diesel and other fuels has emerged between Vladivostok and North Korean ports, in effect creating a new economic lifeline for that country.¹⁴

Additionally, in what must be the final stage (or last gasp) of U.S. sanctions policy, came Trump's executive order on September 21, which, as one observer put it, "will allow the United States to impose a total trade and financial embargo on North Korea."¹⁵ One provision allows the U.S. Treasury Department to seize the U.S.-based assets of any entity that "engages in one successful importation from or exportation to of any goods, services, or technology to North Korea." This order would eliminate nearly all of the North's foreign trade that hadn't already been wiped out in Resolutions 2371 and 2375. Of course, China, which accounts for the lion's share of the North's foreign trade, would be the outside nation most directly affected. Furthermore, banks that finance North Korea's trade would find their assets blocked, and access to the U.S. financial system (that is, to the U.S. dollar) cut off. Entities that "operate" in any of 10 economic sectors in the North would also be sanctionable. Depending on the meaning of "operate," Russian projects in the North such as modernization of a cargo terminal at the port of Rajin would also be affected by this provision. We don't see how Trump's executive order, rather ridiculous on the face of it, can be enforced—especially over objections by the North's main economic partners, which seem likely.

Looking down the road, we expect North Korea to make its own adjustments to mitigate the effects of the new sanctions. An obvious response would be to ramp up participation in some of its traditional spheres of illegal activity. The most important of these are drug trafficking (mainly, heroin and amphetamines), arms trafficking, and counterfeiting of U.S. \$100 bills. But these are old-school, mafia-type crimes, arguably more characteristic of the North's earlier illicit revenue-raising efforts. The modern era offers unparalleled opportunities for more advanced forms of crime. One of these is what might be called the cyber robbery of banks and other cash-holding institutions. In one egregious example in 2016, thieves with suspected links to North Korea made off with \$81 million from the Bangladesh Central Bank account at the New York Federal Reserve Bank. This seems to be a growing pattern of North Korean cybercrime which includes ransomware, digital bank heists, and various other crimes. According to a British intelligence estimate, the North takes in as much as \$1 billion a year from such activities,¹⁶ equivalent to the amount of revenue lost as a result of trade sanctions in UN Resolution 2371. We suspect that state-sponsored cybercrime could become more common as pressure on the North Korean economy intensifies.

Still other types of transactions—high-risk, high-value ones—can be considered in this analysis. Of interest here are the security challenges associated with the risk of state-sponsored proliferation. A state facing extreme sanctions or on the brink of collapse (but still functioning) might attempt to transfer nuclear assets—weapons technology, related fissile materials, or even weapons themselves—to interested international buyers. Considering who the buyers might be—militantly anti-Western states, violent extremist groups, organized crime formations—the point seems worth pondering. Rather than "stifling the economy of North Korea" (in the words of Russian

13 Joby Warrick, "Russian Smuggling Helps Keep Kim Afloat," *Washington Post*, September 12, 2017, p. A1, A14.

14 Warrick, "Russian Smuggling Helps Keep Kim Afloat."

15 Joseph Thomas, "The New U.S. Sanctions Moving from Sanctions to Economic war," *38 North*, September 22, 2017.

16 David Sanger, et al., "North Korea Deploys Corps of Hackers Bent on Chaos," *New York Times*, October 16, 2017, pp. A1, A8.

Foreign Minister Sergei Lavrov),¹⁷ the West should rethink the latest sanctions' more onerous provisions, which could deepen the North's desperation and increase its propensity for dangerous criminal escapades.

The sanctions from Resolution 2371 will cause some economic pain despite these various adjustments and China's deliberately lax enforcement strategy (and also Russia's smuggling of badly needed fuel products to the North). Many analysts point out, however, that the North has already established various networks for the movement of money, people, and goods that are global in scope and deeply imbedded in the commercial systems and law enforcement culture of the countries involved. Many of these networks radiate from Mainland China, and can rely on the support of the growing Chinese diaspora—roughly 40 million migrants scattered across 130 countries outside of Greater China (Hong Kong, Taiwan, Macau). They have been in business a long time and will be exceedingly difficult to deracinate.

Resolution 2371 ushered in a period (fortunately brief) of heated rhetorical confrontation between the United States and North Korea, which rattled U.S. allies and raised fears of a military conflict on the Korean peninsula. Two days after the resolution was passed, the Kim regime issued a statement vowing to add to its nuclear arsenal and stating, "We will make the United States pay by a thousand-fold for all the heinous crimes it commits against the state and people of this country."¹⁸ Two days afterwards, on August 9, Donald Trump made his famous remark that the North Korean threats against the United States "would be met with fire and fury and frankly power the likes of which the world has never known." Speaking of fire and fury, the North's September 2 nuclear test illustrates Kim Jong-un's defiant response to the new sanctions. The lesson here is that sanctions may accelerate the North's nuclear weapons program rather than slow it down—the exact opposite of the intended effect.

Shortly thereafter, the North Korean military, via the Korean Central News Agency, announced that it was considering launching four IRBMs into the ocean near the U.S. Pacific territory of Guam. Within hours, Trump announced that "military solutions are now fully in place, locked and loaded, should North Korea act unwisely." By mid-August, however, things had calmed down. Kim backed away from the Guam threat, and U.S. administration officials reassured anxious parties that U.S. policy focused on diplomatic and economic pressures and aimed only at the denuclearization of the North, rather than removal of the Kim regime. As a result, the threat of war receded for the time being (we hope we've heard the last of "fire and fury" and "locked and loaded"), but North Korean relations remain frozen, unremittingly hostile, with no clear path forward.

Unfortunately, things are not headed in any clear direction, which partly reflects the naiveté of the United States and other interested players. For instance, the August 5 sanctions were conceived partly as a point of entry for engaging Pyongyang in "constructive talks" over its nuclear and missile programs, leading eventually to a rollback or even dismantlement of such programs. Think again. The resolution was greeted with threats ("make the United States pay by a thousand-fold"), and Pyongyang effectively torpedoed Western hopes for serious discussions on nuclear matters. In a speech to a major ASEAN security conference shortly after enactment of the resolution, North Korean Foreign Minister Ri Yong-ho emphasized that "we will under no circumstances put the nukes and ballistic rockets on (the) negotiating table,"¹⁹ and added for good measure that the entire United States was in firing range of North Korean missiles. Regarding the security conference, the *Washington Post* commented, "There were no signs . . . that the sanctions hailed by President Trump as a foreign policy achievement would succeed where past efforts have failed to persuade the country to give up its nuclear weapons."²⁰ (We agree, but we find that judgment a bit premature.)

17 "Moscow Does Not Support Calls to Stifle the North Korean Economy," *Reuters*, August 16, 2017.

18 "North Korea Vows Revenge 'Thousand-Fold' Against America," Associated Press, August 7, 2017.

19 Carol Morello, "Under No Circumstances Will North Korea Give Up Its Nuclear Weapons," *Mercury News*, August 7, 2017.

20 Carol Morello and Anne Gearan, "North Korea Says it Won't Give Up Nuclear Weapons and That Entire U.S. is Within Firing Range," *Washington Post*, August 7, 2017.

The U.S. position on negotiations essentially reinforces Pyongyang's. Several days earlier, Rex Tillerson had said, perhaps anticipating Ri's comment: "We don't think having a dialogue where the North Koreans come to the table assuming they're going to maintain their nuclear weapons is productive."²¹ What then could the sides agree on in order to initiate talks?²² Assuming that North Korea would want to keep its weapons, at least for the time being, discussions would necessarily focus on the "negotiable" parts of Pyongyang weapons establishment, and develop a negotiating strategy accordingly. On the U.S. side, engaging North Korea would require thinking the unthinkable on nuclear foreign policy. As Susan Rice, President Obama's National Security advisor wrote in the *New York Times* recently: "We can, if we must, tolerate nuclear weapons in North Korea, just as we tolerated the far greater threat of thousands of Soviet nuclear weapons during the Cold War."²³

Recent U.S. efforts to establish direct communication with Pyongyang have been rebuffed and even ridiculed (for example, responding to U.S. petitions for talks by firing more missile salvos). The sides seem to have little common ground on which to conduct business, much less strike any kind of deal. Some foreign policy experts have suggested that United States might do better engaging regionally-based players like Russia and China to broker a relationship with Pyongyang. The hope is that these powers could initiate a diplomatic process that eventually brings Pyongyang into substantive discussions on denuclearization.

Russia and China have already collaborated in putting forward a "road map" for denuclearization and conflict resolution (establishment of a "peace mechanism") in the surrounding region. This initiative was mentioned on the first page of the Security Council's 2371 announcement,²⁴ suggesting that China and Russia would now be recognized as first-tier players in managing the North Korean nuclear issue, which makes a lot of sense. Both countries maintain significant channels of influence and access in North Korea, both have decades of experience dealing with the Kim dynasty, and both are committed, at least in theory, to the goal of nuclear-free Korean peninsula. Through contacts and exploratory discussions with relevant North Korean officials, the powers could gain a sense of how much denuclearization Pyongyang could live with as a condition for entering into talks. Secretary Tillerson got it right when he recently said, referring to China and Russia, that the pair "have very good open channels of communication" with Pyongyang. "I'm hopeful that they can use their influence – and I think they do have influence with the regime – to bring them to a point of dialogue."²⁵

The two countries focused the issue in a joint statement by their respective foreign ministries on the Korean peninsula's problems, issued on July 4, the day of the first Hwasong-14 missile launch. The statement unveiled a Chinese so-called "double freeze" proposal, touting it in the context of a "stage-by-stage" Korean settlement plan.²⁶ Specifically, this meant that Pyongyang would observe a moratorium on nuclear weapons and ballistic missile testing, while the United States would refrain from joint military exercises with the ROK, perceived in the North as preparations for regime change or other hostile action (Whether the "double freeze" was worked out with Pyongyang beforehand is anyone's guess—we suspect that it was.). The plus side of the double freeze is that it would have more or less eliminated the long-range ballistic missile threat to the United States. On the other hand, it would have left the rest of the North's nuclear establishment in place, perhaps for an extended period, posing risks to U.S. allies and interests in Asia. The double freeze garnered little support in official Washington.

21 Karen de Young, "UN Imposes Exports Sanctions on North Korea," *Washington Post*, August 6, 2017, p. A7.

22 Tillerson also wanted to condition talks on a cessation of missile launches. The North responded with a flurry of new launches.

23 Susan Rice, "It's Not Too Late on North Korea," *New York Times*, August 10, 2017.

24 United Nations, "Security Council Toughens Sanctions Against Democratic People's Republic of Korea, Unanimously Adopting Resolution 2371 (2017)," Vienna, August 5, 2017.

25 "Moscow and North Korea," *Financial Times*, August 17, 2017.

26 Ministry of Foreign Affairs of the Russian Federation, "Joint Statement by the Russian and Chinese Foreign Ministries on the Korean Peninsula Problems," Moscow, July 4, 2017.

Yet, the freeze can be viewed in a different light: as a diplomatic entry point for a broader negotiated agreement that could restrict Pyongyang's nuclear capacity in the short term. For example, a cap on highly enriched uranium (HEU) and plutonium production (verified by an independent outside agency) could effectively freeze the size of the North's nuclear arsenal. Further negotiations could address the issue of Pyongyang's existing weapons stocks though the results of negotiations are uncertain. The North will want to keep its weapons as long as it feels it needs them for national defense, but with iron-clad security guarantees and incentive-based initiatives (such as sanctions relief and economic aid), it might be willing to put the weapons, or some of them, on the table. This perspective is an optimistic one, though not entirely unrealistic.

Of course, Pyongyang may not agree to any abridgment of its nuclear-ballistic missile capability. By now, it may seek the cachet of a global nuclear power, not just a regional power with some low-yield nuclear weapons with which to defend itself. The successful September test of an estimated 100 kiloton nuclear device may boost the North's drive for international recognition as a serious nuclear player. Also, a more fulsome nuclear establishment coincides with imperatives of an anti-U.S. military strategy. Being able to reach across the Pacific and destroy targets in the continental United States would help establish its global credentials, and provide a long-range deterrent against a possible U.S. attack on the North Korean homeland. Such considerations tend to argue against the "double freeze" option mentioned earlier. Meanwhile, the North continues to upgrade its weapons systems, and the security situation on the Korean peninsula continues to spiral downward; time for a negotiated solution to the Korean nuclear crisis may be running out.

Further complicating prospects for a nuclear settlement is the lack of an organized and coordinated strategy for approaching the Korean nuclear issue. China and Russia on one side and the United States on the other have no common strategic vision to deal with Pyongyang's nuclear behavior and no real consensus on goals. China and Russia believe that the Korean nuclear issue can best be resolved through diplomacy and political persuasion and are adamantly opposed to any use of military force on the peninsula. These countries fear the geopolitical consequences of a North Korean collapse and have acted to bolster the regime at critical moments. For the United States, all options are on the table, a posture punctuated by a major build-up of military hardware on the peninsula (B1B bombers, F-35 fighter jets, three carrier task forces, and so on). These moves by the U.S. are viewed by the other players as a highly destabilizing policy.

More importantly, the players seem to have very different perspectives on timetables and goals for ultimate denuclearization. For the United States, denuclearization means dismantlement of weapons and associated production facilities, following the South African example of the 1980s. The negotiators should focus on attaining this goal as quickly as possible without lingering on interim solutions. To the others, especially (unofficially) Russia, full denuclearization is an impractical goal, at least in the short term. The North meanwhile would be able to keep its weapons—a necessary evil—as long as security conditions internationally and on the peninsula warrant them. Proposals that the issue of denuclearization be delayed until some sort of collective security mechanism is established. This might address North Korean concerns,²⁷ but would likely take years to implement.

27 Artyom Lukin and Georgy Toloraya, "Can Russia Play a Role in Resolving the Korean Crisis?" in *Nuclear Weapons and Russian-North Korean Relations*, Foreign Policy Research Institute.

What then? Should the West concede the existence of a nuclear-armed North Korea, just as it tolerated a much more dangerous Soviet weapons establishment, as Susan Rice argues? Should it try to negotiate a cap on the number and explosive power of the weapons in Pyongyang's arsenal? Can coordinated diplomacy of the United States and the primary regional powers (Russia and China) convince the North to build down its nuclear complex and eventually scrap its weapons programs? Can the powers reconcile their disparate views on how best to deal with Pyongyang (the U.S. relatively hard-line and militarized position versus the others' more flexible and non-coercive approach) These questions become increasingly vital as security conditions on the Korean peninsula continue to deteriorate, reaching a level not seen since the Korean War, but now with atomic weapons in play.

THE SHAPE OF THE PROBLEM

International stability faces a growing threat from an aggressive and heavily militarized North Korea. For a variety of reasons, U.S. policy has failed to contain Pyongyang's publicly stated goal: to build powerful nuclear weapons and delivery systems that can credibly threaten U.S. allies and military interests in Asia and, ultimately, the continental United States. Also, various media reports suggest that U.S. experts are constantly surprised by the North's rate of progress toward this goal. It seems utterly incredible that an economically marginal and demonstrably poor pariah state is now on track to create a full-fledged nuclear capability with global reach—becoming what is now the most dangerous country in the world.

Even though its nuclear program appears to be gathering momentum and reach, there is no evidence that the North has succeeded in developing a nuclear warhead compact enough to be delivered by a North Korean missile vehicle that could fly the weapon to its intended target and detonate. However, given the current rate of progress, which includes two recent ICBM launches, it is simply a matter of time before the Kim regime's nuclear ambitions become a reality. Kim's statements of intent provide disturbing clues to the shape of the nuclear threat to come; the North is still a primitive nuclear power in terms of warheads and missiles, meaning that the United States and its partners must find ways to curb the North's modernization trajectory now before it becomes unmanageable.

Since North Korea is a closed society, not a lot of information is available about the role of nuclear weapons in North Korea's military planning, the scale and rate of progress of its nuclear and ballistic missile programs, and its long-range intentions vis-à-vis the United States and its allies. Experts and even countries disagree on the imminence and seriousness of the North Korean threat; a common theme is that Americans tend to highlight its scarier aspects, often borrowing from North Korea's own rhetoric, while Russians tend to downplay it (At least, this is true in the missile field.). Obviously, an international negotiating strategy toward the North loses some coherence when we don't really know what we're negotiating about.

From what we know about the North's nuclear development, it seems to be proceeding on several main fronts following the same general path of development as established nuclear states. The first is to build a weapons arsenal. No one outside the DPRK has ever seen a North Korean nuclear device. No one knows how many weapons the North has. Experts disagree on the amount of fissile material the North has stockpiled, how much of that is used for weapons as opposed to other purposes, and even on how many kilos of HEU or plutonium are required to make a working bomb. Some projections of stockpile growth verge on the fantastic—50 or 100 weapons by the end of Donald Trump's first term in 2020. Typically, calculations of the number of potential nuclear weapons are based on assumptions of the amount of HEU or plutonium that the regime has amassed, and

on number of kilograms of materials required to make a working bomb. Such estimates tend to be arbitrary and highly variable. To illustrate: one careful study, using different scenarios of trends in fissile material production, estimates that North Korea could have anywhere from 15 to 58 warheads today and 20 to 100 nukes in hand by the end of this decade. The only area of agreement is that the nuclear stockpile is growing, but how quickly remains a matter of speculation.²⁸

The “why” of North Korea’s nuclear program—why the Kim regime decided to make nuclear weapons the centerpiece of its national defense and deterrence strategy (with the United States very much in mind)—has also been a source of controversy. Of course, the desire for international recognition and prestige as a nuclear-capable power is an important motivating factor (and probably has become more important with time). However, the decision to go nuclear has a lot to do with the country’s dire economic situation and general powerlessness before hostile neighbors—plus a desire to intimidate them. Consider that its total gross domestic product is estimated at \$26 billion, much less than the defense expenditures of non-nuclear South Korea (\$36 billion) and Japan (\$46 billion). Developing a nuclear-based force structure is simply cheaper. Russian estimates put the cost at \$100-200 million per year—peanuts compared to building and maintaining a modern conventional military establishment (new tanks, a new air fleet, a real navy, and the like) would have been.²⁹ Also affecting relative costs is that Pyongyang has amassed nearly everything it needs for its nuclear program—a plutonium-producing reactor, a reprocessing plant, P-2 centrifuges for uranium enrichment, adequate deposits of natural uranium and so on—and isn’t dependent on the outside world for much of anything.

Second, Pyongyang seeks to develop a fleet of ballistic missiles of various sizes and capabilities, including ICBMs that can reach the continental United States. The frequency of launches of relatively short-range missiles has increased markedly in the Kim Jong-un era. Most counted as failures³⁰—not uncommon in the early stages of rocket trials elsewhere—and some U.S. analysts chalk up the failures as technological learning experiences that provide valuable data for future trials. Yet, some missiles do work; in May 2017, Pyongyang successfully test-launched a missile, the so-called Hwasong-12, that could reach Guam, 2,100 miles away or about two-fifths of the distance between North Korea and Seattle. And on July 4, the North extended its strategic reach by testing the Hwasong-14 described by Kim Jong-un as an Independence Day “gift” to the United States. Both the Trump administration and the Kim leadership identified the new missile as an ICBM, though Russia’s Defense Ministry, joined by Russia’s Foreign Ministry, contested this judgment (perhaps predictably), calling the Hwasong-14 an intermediate range ballistic missile.

The projectile traveled just 538 miles, landing in the Sea of Japan or thereabouts, but it was launched at a steep angle traveling some 1,700 miles into the atmosphere—if the trajectory were flattened and stretched out, its actual range would have been about 4,300 to 5,500 miles, far enough to reach Alaska. This was seemingly a milestone in North Korea’s weapon development, and it caused some consternation in Washington, which called an emergency meeting of the Security Council the very next day at which it proposed new and more stringent sanctions against the DPRK. Russia and China (also predictably) refused to go along with the proposal, and were berated by U.S. Ambassador Nikki Haley for “holding the hands” of North Korean dictator Kim Jong-un.

Yet, another surprise was in store. On July 28, as if to erase any doubts that Pyongyang had acquired ICBM technology, another long-range missile was launched, this one more advanced than the one launched on July 4.

28 Jenny Town, “North Korea’s Nuclear Ambitions: Presentation to the Asian-American Forum,” Kenwood Country Club, Kenwood, MD, October 28, 2016.

29 Ilya Dyachkov, Artyom Lukin, and Andrey Gubin, “Russian Assessments of North Korea’s Conventional and WMD Capabilities,” in *Nuclear Weapons and Russian North Korean Relations*, Foreign Policy Research Institute.

30 Failures tend to be common in early stages of rocketry development. The United States’ data published in 1965 indicate that nearly half of the approximately 100 early Atlas missile launches and exactly half of the first 22 Titan missile launches failed.

This version climbed 2,700 miles into the atmosphere before coming down 620 miles away in the Sea of Japan. On a straight-line trajectory, that would have carried it 5,600 to 6,200 miles, putting the west coast of the United States well within its range. Of course, as in the case of the earlier test, it would take some time to design a warhead that could be carried aboard an ICBM, withstand the rigors of flight, and survive re-entry into the earth's atmosphere.³¹ How long this would take—months or years—is subject to many variables and can't be predicted with precision.

Beyond building and flight-testing more missiles, the Kim leadership's intent is to improve the regime's offensive capability and survivability by developing missiles that use solid fuel as a power source. Unlike liquid fuel, solid fuel can be stored in the missile for a relatively long time, somewhat akin to gasoline in an automobile tank. A "road-mobile" solid fuel missile can be trucked around and fired from a choice of different locations, making it hard for an adversary to pin down—certainly an asset in a war-fighting context. Whether this represents a real intent to wage nuclear war or simply another form of posturing by the regime is difficult to tell. In February 2017, North Korea claimed to have tested a land-based solid fuel variant of a submarine-launched ballistic missile (dubbed the Pukkekong-2). The missile is launched from a mobile platform, is hard to detect, and can be fired quickly with little preparation.

A third imperative of nuclear modernization relates to requirements of miniaturization—designing a warhead that is small and compact enough to fit aboard a missile, but also destroy the intended target. Pyongyang claims that its miniaturization efforts have already succeeded, raising the possibility that the North could deliver a warhead on a shorter-range missile (such as the Nodong) to South Korea or Japan. Designing a warhead to survive the rigors of flight aboard an ICBM or IRBM that could hit targets on the U.S. west coast would represent a higher order of difficulty; however, at least one observer believes that the North could accomplish this with one or two years of additional testing.³² And in late July 2017, the U.S. Defense Intelligence Agency announced that the North would be able to deploy an ICBM capable of carrying a nuclear warhead to the United States as early as next year. If credible, the report means that the North is about two years off the consensus timeframe for developing such a weapon, a feat that many experts had not thought possible for the deeply impoverished and technologically primitive Kim regime.³³

On the question of explosive potential, the North claims that its September 2016 nuclear test was a "hydrogen bomb," but this is unlikely. The yield was estimated by Japanese and South Korean experts to be about 10 kilotons, but other experts put the yield at 10 to 20 kilotons, roughly equivalent to the bombs dropped on Hiroshima and Nagasaki. Possibly, it was a fission weapon using the hydrogen isotopes deuterium and tritium to magnify its yield, but this possibility seemed rather farfetched at the time. However, on September 2, 2017, the North tested a far more powerful weapon that it claimed was a miniaturized hydrogen bomb. The device (possibly a boosted fission weapon) had an estimated yield of 100-120 kilotons, at least five times, and possibly 12 times, the yield of the September 2016 test. However, much higher figures have been recorded, including one of 250 kilotons by *38 North*. Whether North Korea has mastered the technology necessary to produce a bona-fide two-stage thermonuclear weapon is a matter for speculation and debate, but if not, it's probably just a year or two away from this goal. However, the new test certainly represents a very respectable rate of progress in nuclear weapons technology. It may well be a game-changer for North Korea's drive for international recognition as a credible sovereign state and as a nuclear power to be reckoned with.

31 David Sanger, Chloe Sang-Han, and William Broad, "North Koreans Put California in Strike Range," *New York Times*, July 29, 2016, pp. A1, A9.

32 John Schilling, "What's true and not true about North Korea's Hwasong-14 ICBM: a technical evaluation," *38 North*, July 18, 2017.

33 Ellen Nakashima, Anna Freund, and Joby Warrick, "North Korea on Fast Track to Nuclear Missile," *Washington Post*, July 26, 2016, pp. A1, A14.

Finally, in discussing “The Shape of the Problem,” we consider it essential to share some caveats with our readers. We really don’t know how much of the North’s nuclear weapons program is real and how much might be an elaborate bluff, a cleverly staged deterrence strategy to ward off potential attackers like the United States. No one outside of the country has seen a North Korean nuclear weapon, and no missiles launched have landed anywhere near the continental United States (Estimates of missile ranges are based on projections of flight trajectories.). Whether the North is capable of producing a nuclear warhead, much less fitting one aboard a long range missile, is uncertain. We can’t yet verify claims that the North has tested a hydrogen bomb and so on. We also note that our Russian colleagues have a far more conservative view of the North’s capabilities and intentions than has the United States. For example, they call an ICBM that can reach the continental United States an imaginary threat and also say that it would be a waste of military resources to make an ICBM.³⁴ Our colleagues also say that U.S. experts and official assessments have “begun to shift toward admitting the high likelihood” that the North really possesses H-bomb technology, while many experts in Russia remain skeptical, believing that the September 3 test was actually of a boosted fission weapon.³⁵ On the other hand, Putin, in a recent swipe at high-octane U.S. sanctions policies, stated, “It is 2017 already, and the country has been living under permanent sanctions, and instead of a nuclear bomb they have now already a hydrogen bomb.”³⁶ Maybe the international consensus is beginning to shift also.

On the ICBM issue, at least, the U.S. could be taking a leaf from Kim Jong-un’s book—overestimating the threat from the North, while the Russians could be underestimating the threat (Russia, unlike the United States, is not directly threatened by the North’s military build-up.). We won’t speculate at this point on which side has the stronger case. Yet, in Washington, perceptions of the threat drive policy decisions, and these are our main concerns.

34 Ilya Dyachkov, Artyom Lukin, and Andrey Gubin, “Russian Assessments of North Korea’s Conventional and WMD Capabilities,” in *Nuclear Weapons and Russian North Korean Relations*, Foreign Policy Research Institute.

35 Dyachkov, Lukin, and Gubin, “Russian Assessments of North Korea’s Conventional and WMD Capabilities.”

36 “Putin Knew about North Korea’s Nukes in Early 2000s,” *Sunday Express*, October 4, 2017. We are indebted to Artyom Lukin and Georgy Toloraya for the reference.

A FAILURE OF POLICY

In the weeks after the 2016 election, U.S. President Barack Obama described North Korea as the top national security problem for the incoming Trump administration. The administration's North Korea policy is still a work in progress, but so far it follows the pattern of previous years, though with refinements that would tighten the screws on the North economically and diplomatically. The most important policy tool in the U.S.-UN toolbox has been international sanctions—a set of prohibitions and directives that seek to govern Pyongyang's relations with the outside world.

North Korea sanctions, imposed in eight rounds over the past 11 years, are intended generally to convince the North to cease its illegal procurement activities and to embark on the path toward eventual denuclearization. The policy was initiated in July 2006 following a series of North Korean missile tests. Recent iterations, particularly UNSC Resolutions 2270 and 2321 of 2016, contain 101 provisions, which mostly focus on three objectives: to deny the North access to militarily sensitive goods and technologies, to constrict the DPRK's overseas banking channels (such as the number of its bank accounts in third countries), and to limit Pyongyang's foreign exchange earnings from trade. Additional sanctions were passed in August and September 2017 (Resolutions 2371 and 2375) in the wake of a test launch of an ICBM and a test of a high yield weapon that Pyongyang claimed was a "hydrogen bomb." Most of North Korea's foreign trade today is subject to outright bans, including sales of coal, iron ore, fish products, textiles, and various non-ferrous metals. The direct effects of these measures on Pyongyang's nuclear development so far have been small, though some consequences for the long-term development of the civilian legal economy can be anticipated.

The apparent failure of international sanctions relative to U.S.-UN expectations is attributable to many factors, not all of which will be detailed here. However, several prominent factors seem to have particular explanatory value. One of these is that the North over the years has evolved highly sophisticated techniques to evade detection—a dizzying array of front companies, shell companies, joint ventures (often with Chinese banks), correspondent accounts, bulk transfers of gold and cash, and the use of foreign-flagged vessels to transport sanctioned goods. The scope, sweep, scale, and inventiveness of such operations simply boggle the mind.

Unsurprisingly, neighboring China (itself the hub of a web of illegal activities) has proved to be a particularly useful partner in such evasive practices. One noteworthy concealment stratagem, according to a recent MIT study by John Park and Jim Walsh, has been to "rent Chinese companies to carry out procurement of sanctioned products," which may include Western-made technologies and components. Chinese banks are used to sending and receiving payments along the procurement-logistics chain—North Koreans are uninvolved in these transactions. Such deals are brokered by Chinese intermediaries, some with established representation abroad. This is a slick system, posing enormous challenges to law enforcement to identify, unravel, and shut down. Park and Walsh argue that this symbiotic pattern of business relations could become more widespread as enforcement pressure on the North

intensifies. “There will be not North Korean bank accounts,” they write, “they will be Chinese accounts.”³⁷

A second and related reason for the relative ineffectiveness of sanctions comes down to a lack of commitment and political will on the part of member states. Many don’t bother to monitor the North’s activities within their territories, much less to enforce sanctions when these are warranted. According to a February 2017 UN Panel of Experts report, a total of 116 member states had failed to submit required reports on what steps they have taken to implement the sanctions³⁸ regime (investigations, seizures, arrests, and so on) to UN authorities, which likely signifies that they have done nothing or next to nothing. The largest number (43) of non-performers was in Africa, a principal market for North Korean weapons and military-related services.³⁹ In fact, only a handful of states see North Korea as a first-order international security threat. The prevailing attitude seems to be indifference or avoidance, reflecting commercial aspirations or ties (which sanctions tend to complicate) and, perhaps, increasing acceptance of the North as a legitimate state and *de facto* nuclear power.⁴⁰

A third and related explanation is the weak and unenthusiastic support of China to implement harsh penalties against its neighbor. The reasons are largely political and relatively complex. Like everyone else, the Chinese favor a nuclear-free Korea and have signed on to the UN Resolutions of 2016 and 2017 in support of this aim; moreover, as the DPRK’s principal economic lifeline, it theoretically can wield sufficient clout to threaten the Kim regime’s survival and force a change in its nuclear weapons policies. At least this is what successive U.S. administrations have steadfastly believed. China generally is portrayed as the centerpiece of U.S. efforts to resolve the Korean nuclear crisis, and Washington consults almost exclusively with Beijing on nuclear policy vis-à-vis the North.⁴¹

Yet, China is also a North Korea patron, treaty ally, and guarantor of its viability as an independent state. China views North Korea as an important buffer against potential enemies, especially Japan and the U.S.-ROK alliance. It has no wish to see the country collapse economically or politically. Moreover, it fears the consequences of an implosion of the North Korean regime, ranging from a massive and uncontrolled flow of refugees into northeast China to the reunification of the Koreas under South Korean auspices. A further, if seldom articulated, concern is the prospect of nuclear anarchy next door—gravitation of unsecured nukes into the hands of competing political factions—a conflict that could spill over into the PRC and Northeast Asia generally.

For these reasons, the strategic assumptions of Beijing’s Korea policy necessarily differ from those of the United States. America’s preeminent concern is that North Korea might launch an ICBM-borne nuclear attack on the United States. America would gladly dispose of the Pyongyang regime if there were a safe way to do it, whereas China fears the regime’s economic and political collapse, and therefore is wary of harsh sanctions and other high pressure tactics that could impair North Korea’s functioning.

Yet, additional factors may also condition Chinese mindsets on the North’s nuclear problem. For example, U.S.-China relations could be characterized as troubled or quasi-unfriendly. There are quite a few Asian issues on which the sides disagree: Taiwan, the South China Sea, Terminal High Altitude Area Defense (THAAD), trade imbalances, and so on. And the subtext of U.S.-China relations (despite the naiveté of many U.S. China hands)

37 John Park and Jim Walsh, “Stopping North Korea, Inc. Sanctions Effectiveness and Unintended Consequences,” Cambridge MA, MIT Press, September 10, 2016, pp. 22, 60.

38 Panel of Experts Report to the UN Security Council, Annex 2-1, Reports by Member States, National Implementation Reports, Vienna, January 30, 2016, p. 10.

39 Ibid. Overview of Reporting by Region, p. 11.

40 Joel Wit, “Trapped in No Man’s Land: The Future of U.S. Foreign Policy Toward North Korea,” *38 North*, June 18, 2016.

41 See, discussion in Artyom Lukin, “Thinking Beyond China: When Dealing with Pyongyang, Is There a Role for Russia?” *FPRI E-Notes*, April 4, 2017.

really boils down to competition for primacy in East Asia. Xi Jinping has made little secret of his desire to see America gone from Asia, at least militarily, and its Asian alliance system dismantled, especially the pacts with South Korea and Japan. So, the Chinese can't be expected to carry our water over North Korea and are generally reluctant to "get tough" on Pyongyang, at least to the degree demanded by Washington.

Indeed, China's enforcement of sanctions has often been deliberately lax in enforcing the UN resolutions, allowing the North's various illicit activities to flourish on Chinese soil—potentially a boon for the North's various weapons of mass destruction (WMD) programs. These are the realities the United States faces in trying to garner or coerce Beijing's support for U.S. non-proliferation policies. In fact, the United States has threatened to impose "secondary sanctions" on Beijing to elicit a more robust performance in sanctions enforcement. U.S. demands and threats have become more insistent in recent months, reaching a crescendo following ICBM launches in July 2017 and the "hydrogen bomb" test in September 2017. The Trump administration reportedly is now contemplating terminating trade relations with all countries doing business with North Korea. Of course, China, which accounts for 90 percent of the North's foreign trade, would be most directly affected by such a ban.

Finally, the apparent successes of North Korea's domestic economy, most evident in a growing consumer culture, have limited the leverage of sanctions on the North's nuclear policy and decision-making. In effect, somewhat to the West's chagrin, the North Koreans were able to implement the so-called Byungjin policy—which calls for simultaneously improving the civilian economy while moving ahead with the nuclear-missile program.⁴² Various reforms are underway to spur productivity and growth in agriculture and industry, to unshackle the retail sector, and to boost foreign investment (for which the Kim regime created 25 new Special Economic Zones). To be sure, all this doesn't mean that the sanctions policy is a useless failure, as some writers suggest; it has forced the North, a poor country by any standard, to rely on non-transparent, circuitous, and high cost methods of WMD procurement. Unfortunately, the North seems to have negotiated these challenges successfully, while continuing to make major strides forward in its weapons programs.

Meanwhile, the various Security Council resolutions made a credible effort to cut North Korea's ties to the international economy; that is, to undermine its trade and investment prospects. For example, the 2016 measures banned exports of rare earth minerals and of seven different non-ferrous metals, conditionally extending the ban to coal and iron. However, the regulations allowed sales for humanitarian purposes—a loophole that partly blunted their impact. To further hamstring commerce, Resolutions 2270 and 2321 also required member states to inspect all cargo transiting their territories to or from North Korea, but this provision was not widely enforced. A bigger blow was the imposition of financial sanctions, which seriously complicated settlement of accounts with foreign business partners. Among other things, these disallowed correspondent relations between DPRK banks and foreign banks, and also required member states to close existing bank branches and representative offices on DPRK territory (To some extent, North Koreans have avoided these restrictions by settling payment obligations in cash and by using Chinese banks to move money between the DPRK and Russia.⁴³).

Overall, the most devastating impact of the Security Council resolutions may have been on foreign investment, especially from Russia. Heavy sanctions on North Korea made it difficult or unrewarding to do business there. Especially notable were the above-mentioned bans on exports of valuable minerals and coal stipulated in Resolution 2270, introduced in March 2016 (For good measure, Resolution 2321 enacted in November of that year added several new metals to the embargoed list: silver, copper, nickel, and zinc.). Along with congealed bank transactions, these effectively torpedoed several large Russian investment projects which depended on selling

42 See Wit, "Trapped in No Man's Land," p. 17. Wit's point is that U.S. policy failed to force Pyongyang to choose between economic development and nuclear-missile development.

43 Artyom Lukin and Liudmila Zakharova, "Russia-North Korea Economic Ties: More Than Meets the Eye?" *FPRI E-Notes*, October 6, 2017.

North Korea's mineral commodities abroad to finance modernization of the country's industrial infrastructure. Indeed, implementation of these projects would have transformed the face of the North Korean economy—apparently a great opportunity lost. At any rate, Russian-North Korean economic relations deteriorated during 2016, and Russia suspended most major investment plans. Possibly, these could be resurrected in a post sanctions-environment,⁴⁴ assuming Russia is still interested.

Yet, as North Korea's ties to the international economy withered and prospective foreign investors evanesced, the domestic economy managed to forge ahead. The most visible example was the development of free and semi-private markets—ever larger, in more cities, and with a wider assortment of goods—testifying to the communist regime's partial embrace of market principles. More upscale shopping opportunities have become available as recounted by German economist Rudiger Frank. Pyongyang showcases the Kwangbok Area Shopping Center, a three-story building that comprises a supermarket, a clothing emporium, “something like” a food court, and a place to change dollars into won and vice-versa. In fact, rampant consumerism and accoutrements of modernity are increasingly evident in Pyongyang today; among the obvious examples recorded by visitors are private cars, taxi companies, travel agencies, pizza parlors, fashion shows, street lights, traffic jams, and wheelchair service at the airport.⁴⁵ Signs of the new consumer culture are also appearing in the port and rail hub of Rajin, (which houses a shopping complex) and in other provincial cities.

Overall, the Byungjin policy and associated market reforms are allowing the domestic economy to at least scrape by, while the regime concentrates on priority military goals. Since the regime doesn't publish statistics, we don't know for certain how well the policy is actually working. Yet, there are positive notes. For instance, the Bank of Korea now estimates that the DPRK economy showed real growth of 3.9 percent in 2016, which helps to compensate for the UN sanctions and Pyongyang's ruptured relations with much of the outside world.⁴⁶ The growth encompassed civilian as well as military spending—an apparent vindication of the Byungjin policy.

An important indicator that life is getting better in the North is the declining rate of defections to South Korea. For example, in the five last years of Kim Jong-il's rule (2007-2011), defections averaged 2,678 per year, but in the years following Kim Jong-un's accession to power, they averaged 1,340. Moreover, according to a Ministry of Unification study (Seoul), “Economic difficulty and hunger were cited as the first and main reasons of defection before 2013, but desire for freedom ranked top in the reasons for defection after 2014.”⁴⁷ Tougher border controls introduced by Kim may have something to do with the decline, but the favored explanation is that people are simply better off under Kim Jong-un than they were under his father or any of his predecessors. Other current policies have kept the economy afloat and provided a taste of modernity to the population—another reason why Resolutions 2270 and 2321 had limited utility as instruments of economic pressure and non-proliferation policy.

This is the way things were until the summer of 2017. The U.S. sanctions policy continues to evolve, reflecting advances in the North's nuclear and missile technology. The July 28 missile test and the detonation of what may have been a hydrogen bomb on September 3 precipitated two more UN resolutions (2371 and 2375) which together banned outright all of the North's main exports, costing the economy more than \$1.7 billion per year. As these successive resolutions suggest, U.S. sanctions policy is increasingly driven by desperation, rather than solid calculation. This is quite noticeable to America's main critics. “We should not act out of emotions and push North Korea into a dead end,” said Vladimir Putin at a recent news conference with South Korean President

44 Georgy Toloraya, “Russia's North Korea Conundrum,” *The Diplomat*, March 17, 2016.

45 Ruediger Frank, “Consumerism in North Korea: The Case of the Kwangbok Shopping Center,” *38 North*, April 6, 2017.

46 Jiyeyun Lee, “North Korea's Economy is Growing at its Fastest Pace Since 1999,” *Bloomberg*, July 20, 2017. The figure apparently includes military spending such as weapons testing and civilian spending, such as mining, manufacturing, and utilities.

47 Daryum Ji, “Middle Class North Koreans Fleeing for Non-Economic Reasons – MOU,” *NK News*, September 7, 2016.

Moon Jae-in. In the United States, the consensus among North Korea experts is that even extreme sanctions won't appreciably affect the North's WMD programs, and further sanctions risk jeopardizing its economic future besides. Our analysis concurs with this consensus for reasons cited in this section, adding the observation (from the discussion in "The Shape of the Problem" section) that North Korea already has most of what it needs militarily, especially the capacity to manufacture powerful nuclear weapons. So even if the sanctions "worked," they would be largely irrelevant—the horse has already left the barn.

NEW PATHWAYS: THE RUSSIA FACTOR

Two major shortcomings can be identified in the American approach to dealing with North Korea. One is the almost exclusive reliance on economic sanctions as a policy tool. This combines with an increasingly assertive American military presence (recently enhanced on the Korean peninsula with three aircraft carriers and nuclear-capable B1B bombers). More than anything, this is a unilateral psychological device that probably just irritates the North Koreans and, if anything, causes them to accelerate their long-term nuclear planning. Nonetheless, that subject won't receive significant treatment in this essay. The second shortcoming is the dubious proposition that America can count on China to use its acknowledged massive economic leverage to bring about full denuclearization of the North. Indeed, China could probably shut down the entire DPRK's economy at a moment's notice, but this is merely a theoretical prospect. For various optical and strategic reasons which were discussed previously, China has been a reluctant partner in enforcing UN sanctions, viewing them as potentially destabilizing. Among other things, this has allowed multiple links to develop between Chinese entities and North Korean trading companies interested in purchasing military-related goods.

Though ineffective in addressing the North's nuclear threat, sanctions cause some economic pain and should be maintained in some form—though perhaps eased a bit in response to concessions by the North on nuclear policy. But sanctions should be combined with diplomacy, with the general aim of reaching a negotiated and peaceful solution to the Korean nuclear crisis. The United States, hoping that sanctions alone would resolve the issue, hasn't seriously explored the diplomatic track for the past five years, during which time the Kim regime has amassed power and self-confidence, making denuclearization a tougher sell. Still negotiations remain the only reasonable and safe way to achieve a nuclear-free North Korea, or at least a rollback of its present capabilities, though the process will be long and arduous.

With respect to China, the reality is that the PRC's core interests in North Korea differ significantly from America's. China may care less about a North Korean ICBM hitting the continental United States than about the threat of instability and nuclear anarchy in its backyard. As noted, China is unlikely to exert sufficient pressure on North Korea to change the North's weapons policies. Nevertheless, official Washington consults almost exclusively with the Chinese (alternately prodding and cajoling them) in developing North Korea policy. As Vladivostok scholar Artyom Lukin puts it, Washington "is obsessed with China as the only way to solve the Korean nuclear problem,"⁴⁸ thus ignoring the potentially valuable contributions of other regional actors and players (The Chinese

⁴⁸ Lukin, "Thinking Beyond China."

themselves complain about being stuck with all the heavy lifting on North Korea, and would like others to play a larger role.). One such player is Russia,⁴⁹ a country with a powerful strategic presence in Northeast Asia, a history of involvement in Korea (dating to the late 19th century), and one who retains a vital geopolitical stake in the peninsula. Russia should play a leading role in international deliberations regarding North Korea, considering especially that the United States is an outsider to the region and that U.S. policy hasn't succeeded even minimally in containing North Korea.

The idea that Russia can be a stabilizing force in Northeast Asia and a restraint on the Kim regime's nuclear designs hasn't exactly caught on in Washington policy circles. Washington tends to view Russia through a European lens⁵⁰—that is, as an adversary—while overlooking opportunities for cooperation in the East. In North Korea, Russian and American interests seem to overlap. But what can Russia usefully add to a current array of (largely failed) Korea policies, which are informed mainly by the United States and China and which have proved singularly unsuccessful? What channels of access and influence can Moscow command vis-à-vis the North, and how can these be best exploited? How does Russia envisage the timelines and steps required for a satisfactory denuclearization agreement, and how does this square with stated U.S. objectives?

To begin with, it is important to look at the overall setting of Russia-DPRK relations. Russia shares a short 11-mile border with North Korea and boasts a wealth of experience dealing with the Kim dynasty, which it installed in power some 70 years ago. History matters, creating a unique bond between the nations and allowing Moscow to talk to Pyongyang in ways in which other foreign leaders cannot—perhaps even taking up issues of nuclear policy. Today, Russia is the only important power with which North Korea maintains more or less friendly relations and (up to a point) a relationship of trust.⁵¹ Importantly, the DPRK's relations with China, its main benefactor, have recently soured for various reasons: one is because Beijing is now increasing economic pressure on the North. For example, China cut purchases of North Korean coal in February 2017; in May 2017, it banned fuel shipments by the state-owned China National Petroleum Corporation; and in September 2017, China banned North Korean citizens' opening new accounts at China's five largest banks. China for its part worries that its ally's provocations (ICBM launches, the "hydrogen bomb" test) invite a larger U.S. military build-up, increasing the risk of war on China's doorstep. If relations deteriorate further, the North will be motivated to expand trade and other ties with Russia to compensate for any losses inflicted by China. Indeed, reports have recently surfaced of Russian smuggling of diesel and other fuels to North Korea to offset shortages—perhaps part of a trend in which Russia assumes part of China's patron role vis-à-vis the North.⁵²

Russia's influence over North Korea, such as it is, is largely political and strategic. Like China, Russia is a vitally important player in Northeast Asia, with a major geopolitical stake in peace and stability in the region. Both powers are committed to a nuclear-free Korean peninsula. Both are permanent members of the UNSC, with authority to decide on sanctions policy vis-à-vis North Korea. Both participated in the Six Party Talks (2003-2008), a forum for discussing the security implications of the North's nuclear weapons program.

In addition, Russia's influence is augmented by economic, geographic, and other links to North Korea. Transportation is a particularly important aspect here. Russia's cooperation is essential—perhaps more so than China's—to the North's ability to communicate with the outside world, with one railway connection (across the

49 Significantly, China mentions Japan, South Korea, and the United States as alternative lifters, but apparently not Russia. I am indebted to Richard Weitz for calling attention to this point.

50 Chris Miller and Joshua Walker, "Russia is an Asian Power Too; Japan Understands but Does the United States?" *War on the Rocks*, April 2017.

51 See, for example, Artyom Lukin and Rensselaer Lee, "How Russia Could Help Curb North Korea's Nukes," *Huffington Post*, June 2016.

52 Joby Warrick, "Russian smuggling helps keep Kim afloat," *Washington Post*, September 12, 2017, pp. A1, A14.

Tumen River connecting Russia's Khasan to the DPRK's Rajin). There is also regularly scheduled air service on the North's national airline between Vladivostok and Pyongyang as well as a recently installed ferry service from Vladivostok to Rajin. Yet, the intensity of economic and commercial contacts pales beside China's—and today Russia is a relatively minor economic player in the North.

In 2015, the most recent year for which comparative data are available, China's direct trade with the North was about \$5.5 billion, almost 70 times Russia's mere \$84 million (The 2016 figure was even lower (\$77 million), equivalent to 1.2 percent of the DPRK's total foreign trade). Admittedly, the figures exclude the value of Russian origin goods (such as fuel products) exported to the North through China. The value of this trade has not been reliably estimated, but Russian specialists believe that the indirect trade could be three times larger than the direct trade—still making Russia a marginal trading partner compared to China. Also worth mentioning are the estimated 30,000-40,000 North Korean guest workers currently present in Russia. These workers, employed mostly (around 70 percent) in construction and home remodeling, plus agriculture and forestry, remit some \$115-200 million to their homeland each year (The number of workers seems destined to grow. As of 2015, 47,364 North Koreans had received permits to work in Russia already.). Russia is said to be the largest recipient of such workers, whose earnings obviously exceed the value of direct Russia-North Korea trade by a significant margin.⁵³ (According to UN Resolution 2375, member states are not permitted to issue new work authorizations for contract laborers imported from the DPRK. This provision will be difficult to enforce because there is no system for monitoring individual contracts or the time workers spend in the country.)

Russia would like to have a more robust economic presence in North Korea, and until recently, was actively pursuing this aim. The early years of Kim Jong-un's rule (2012-2015) were a period of great euphoria in Russia-North Korea relations, and enthusiasm for establishing new cooperative ties ran high in both countries. Russia wrote off 90 percent of the North's Soviet-era debt (\$11 billion in 2014), and a Russian-North Korean Business Council was set up in 2015. The countries' leaders called for increasing bilateral trade about 1,000 percent to \$1 billion by 2020. Exchanges of high-level delegations proliferated, and many new agreements were signed.

Within this favorable context, Russia aimed to develop core investment projects in automotive, electric power, zinc, mining of ferrous metals, transportation, and other fields. One Moscow company (Mostovik) declared its intention to invest \$25 billion over the next 20 years in modernizing the North's railway system; like with other projects, the company expected to be compensated from privileged access to the North's mineral wealth. Taken together, such projects could have put the North on a path to sustained growth as well as put Russia pretty much in charge of the North's long-term economic destiny.⁵⁴

But this was not to be. In January 2016, the North set off its fourth nuclear test; in February 2016, it test-fired a long-range ballistic missile; and in March 2016, the UN adopted Resolution 2270 (which Moscow backed, to show support for the resolution's nonproliferation objectives, even though it ran counter to Russia's economic interests). Since then, Russia-North Korea relations have been in decline. Moscow backed away from the big economic investment projects, more or less terminated financial dealings with the North, and for good measure suspended nearly all high-level (ministry and above) contacts. The only project to be implemented was the renovation of the 54 kilometer Khasan-Rajin railroad line, completed in 2013. The state-owned Russian Railways funded the renovation to the tune of \$300 million, signifying Moscow's willingness and capability to assume

53 Lukin, "Thinking Beyond China;"

54 Liudmila Zakharova "Russia-North Korea Economic Relations," Joint U.S.-Korea Academic Studies, KEIA, 2016, pp. 213-213, 217-220; Liudmila Zakharova, "Economic Cooperation Between Russia and North Korea, New Goals and Opportunities," *Journal of Eurasian Studies*, Volume 7, Issue 2, July 2016; and Georgy Toloraya, "Russia-North Korea Economic Ties Gain Traction" 38 *North*, November 6, 2014.

a significant stake in the North's modernization—a reality not lost on the Kim regime.⁵⁵ Besides, the other big economic projects could eventually be reintroduced as part of a deal with the North on nuclear security issues.

Other points of potential economic leverage derive from Russia's strategic location, which would allow it to implement several large-scale projects that could join the two halves of the Korean peninsula in a dynamic growth framework. The most publicized and widely discussed of these include building a natural gas pipeline, electricity transmission lines, and railway projects linking the Russian Far East and South Korea through DPRK territory. Income from these projects, if realized, could greatly boost the North's economic fortunes and prospects for integration with dynamic Asian economies. Russia would benefit from direct access to South Korea's developed economy and 51 million customers, and Seoul would benefit from greater energy security (Russia also sees South Korea as a stepping stone to developing influence in other East Asian nations.). Of course, such projects would require a much improved security environment on the Korean peninsula, including a more engaged relationship between the Koreas and major concessions from the North on nuclear policy.

Experience suggests that such transformative economic inducements alone are not sufficient to sway the North's decision-making on nuclear weapons and missile policies. Nor are sanctions; recall that the Kim regime was willing to incur international sanctions and scuttle a promising economic relationship with Russia by conducting its fourth nuclear test and launching a long-range missile in early 2016. However, economic incentives have been part of agreements with the North in the past. The Agreed Framework of 1994, which shut down the North's plutonium production for eight years, offered 500,000 tons of heavy fuel oil annually, plus two Light Water Reactors for electricity supply (never delivered).⁵⁶ As part of the 2012 so-called Leap Day Agreement, the United States would provide 240,000 tons of food aid in return for which the North would suspend nuclear and missile testing, as well as uranium enrichment activities, and even allow International Atomic Energy Agency (IAEA) inspectors into the country (A subsequent satellite launch by the North effectively torpedoed that agreement.). There seems to be an unfortunate pattern here. The Kim regime has become increasingly wedded to the idea of building a full-fledged nuclear establishment—now considered vital to the country's survival—and attaches less importance to economic stimuli or disincentives. Of course, this may be a form of regime posturing, since the country's needs are seemingly endless. Economic incentives by themselves won't change minds in Pyongyang, but combined with the right security guarantees they might.⁵⁷

In sum, Russia is a seriously interested player in North Korean affairs and can help provide a general framework and guidelines for proceeding with Pyongyang, and even conduct independent (if exploratory) negotiations with the Kim leadership. Relations with the North are fairly good, even under the international sanctions regime. Direct economic ties with the North are currently quite limited, but there is little doubt about Russia's potentially transformative influence on the North's economic development (Besides, Pyongyang would like to diversify its economic relations away from China and may seek Russia's protection in the event of a serious downturn in Beijing-Pyongyang relations.). Cross-border linkages, Russian fuel exports, and the institution of guest workers help expand Russian channels of influence in the North, though they can also be used as pressure points (blockades, cuts in exports, kicking out guest workers, and so on). Non-economic factors also contribute to closer relations; among them are scientific and technical exchanges, vital in modernizing the North's scientific base, and educational exchanges such as that between Kim Sung-il University in Pyongyang and Far Eastern Federal

55 The port reportedly is doing quite well. Freight traffic is increasing, which is good news for the North Korean economy. The original idea was to ship Russian coal to South Korea via the port. Though several shipments were made, the South Koreans stopped accepting coal following the North's nuclear and missile tests in early 2016. These shipment arrangements were permitted as one of the waivers in UN Resolution 2270.

56 One reason that the agreement collapsed was U.S. suspicion, based on credible intelligence reporting, that the North had built a secret facility for the enrichment of bomb-grade uranium.

57 "North Koreans Agree to Freeze Nuclear Work: U.S. to Give Aid," *New York Times*, February 29, 2012.

University in Vladivostok. Russia is the second largest recipient of North Korean students, after China, though the overall number is small—“no more than 150.”⁵⁸

Taken together, these various factors extend Russia’s range of contacts in North Korea and help solidify the bases of friendship between the countries. But whether or how much these various interactions could translate into direct influence over the North’s nuclear-ballistic programs seems unlikely at this point.

⁵⁸ Lukin, “Thinking Beyond China.”

DEALING WITH NORTH KOREA

Significant differences exist between Russian and Chinese positions on managing the North Korean nuclear threat and the official U.S. (or at least the Trump) position. Russia and China favor non-coercive approaches in dealing with the issue, are generally wary of sanctions, and oppose the use or threat of military force. By contrast, Trump has favored expanding sanctions—calling on countries to sever or degrade diplomatic ties with the North and to expel North Korean guest workers. Moreover, Trump says that all options are on the table and that a major conflict with the North is a distinct possibility. To emphasize the point, the United States has ramped up U.S.-ROK military exercises and has introduced massive amounts of military hardware into the region (three carrier-led strike forces, two B1B bombers, a number of F-16 fighters, and THAAD, for example). Finally, and this is an important distinction, some high-level Russian officials favor pursuing a moratorium on nuclear and missile testing as an attainable goal, while the United States believes that such a freeze, if unaccompanied by other steps, would leave too much of the North's nuclear weapons program intact.

Given these differences in approach, Russia and China should themselves try to articulate a common set of principles and a common strategy for dealing with the North. Such collaboration between the two main diplomatic supporters and economic partners has an impact on the North's strategic thinking and could improve the prospects of an eventual nuclear deal. Ideally, such a cooperative effort should also consider aspects of the U.S. "hard line" position—not so much on sanctions or military options, but on the desirable scope of such a deal—and how much denuclearization to push for. This is important because the United States is now and has been for some time conducting "secret" talks with the North over its WMD programs, partly to reestablish a diplomatic track for future negotiations with the Kim regime over its nuclear policies. Have the discussions touched on possible interim options short of full nuclear disarmament? Should Russia and China be brought into the talks at some point, given their dominant position as regional actors? How great a priority is a nuclear-free North Korea for these countries, and what policies would they espouse to achieve this end?

Russia's ascension to a more prominent role in North Korean affairs is long overdue and could add some heft to the international community's negotiating positions vis-à-vis Pyongyang. This is especially the case if Russia can coordinate its sources of influence and leverage with those of other regional players, especially China and (somewhere down the line) the United States. Though Russia and China have somewhat different interests at stake in the Korean peninsula, they might be able to agree on a common set of principles and a common strategy for managing the North Korean nuclear issue. Faced with such a united front and unable to play the two countries against each other or to count on Moscow's continued friendship, Pyongyang might begin to rethink its nuclear weapons policy, or so the theory goes.

But what kind of settlement, if any, would Pyongyang be willing to agree to? Many Russian analysts believe that full denuclearization is a distant goal, contingent on a vastly improved security environment on the Korean peninsula, iron-clad security guarantees for Pyongyang, and normalization of U.S.-North Korea relations. Many experts believe that North Korea would never give up its nuclear weapons under any circumstances, viewing them as integral to national defense and to the North's survival as a nation⁵⁹ (Indeed, the 2012 Kim Il-sung–Kim Jong-il Constitution defines North Korea as a “nuclear-armed state.”). Could the United States tolerate the existence of the North as a sovereign nuclear state for some defined period? If not, what's the alternative? Weighty questions, indeed.

For Pyongyang, the main issue may be trust. North Koreans like to cite the example of Libyan President Muammar Gaddafi, who terminated Libya's nuclear weapons program in 2003 in return for promises of economic benefits. Eight years later, he was overthrown by rebel forces with the assistance of NATO, and later murdered—in a most grisly fashion according to some accounts. The following comment from a DPRK Foreign Ministry spokesman describes rather eloquently the lessons the North Koreans believed they learned from Gaddafi's fall from power:

The present Libyan crisis teaches the international community a valuable lesson. . . . Libya's nuclear disarmament, much touted by the United States in the past, turned out to be a mode of aggression, whereby the latter coaxed the former with such sweet words as ‘guarantee of security’ and ‘improvement of relations’ to disarm itself and then swallowed it up by force. It proved once again the truth of history that peace can be preserved only when one builds up one's own strength as long as high-handed and arbitrary practices go on in the world.⁶⁰

If the North insists on keeping its weapons, for whatever reason, what room is there to negotiate? Many Russian observers and some U.S. analysts believe that the best way to proceed is to negotiate a freeze or moratorium on nuclear and ballistic missile testing. Such an agreement would have the advantage of practically eliminating the North Korean ICBM threat to the United States, but would leave the North's nuclear establishment in place, perhaps for an indefinite period. This approach does not have much support in Washington. As Secretary of State Tillerson noted during a recent trip to South Korea, it would enshrine a “comprehensive set of capabilities” that already pose too great a threat to the United States and its allies.⁶¹ Of course, there are different ways of defining a freeze. Some combination of diplomatic arm-twisting and political and economic pressure, plus an appropriate package of incentives could induce the North to take additional steps toward denuclearization.

Such an option would still leave North Korea as a de facto nuclear state, but deactivating even a part of the North's weapons production complex could provide diplomatic momentum for achieving a more comprehensive nuclear settlement. Much would depend on the Kim regime's priorities at any given time—especially the importance it places on economic stability and growth as opposed to nuclear weapons development. While this seems unlikely at present, the official diplomatic track has been essentially moribund for the past five years, so the regime's true negotiating position is not known with certainty. It's just possible that a carefully crafted and concerted diplomatic effort by the primary regional powers could strike the right notes with the Kim regime, perhaps helping to push its nuclear policies in a more auspicious direction—or at least that is the hope.

59 The idea that denuclearization is a long-range prospect and that North Korea might keep some of its weapons for an indeterminate period is said to be widely shared within Russia's foreign policy establishment. This is not the position of the Russian government, however. As Sergei Lavrov says, “Russia does not accept a North Korea that possesses nuclear weapons,” *RT*, August 11, 2017.

60 Cited in Andrei Lankov, “Nothing Can Really Be Done about North Korea's Nuclear Program,” Project Muse, Undated, @2015 Seoul, p. 10.

61 “Tillerson Rejects Talks with North Korea,” *New York Times*, March 17, 2017.

A FINAL WORD

Russia is an influential enough player on the Korean peninsula to use its good offices to engineer a diplomatic channel and framework for negotiations with the North—and perhaps to guide the international community toward a resolution of the ongoing Korean nuclear crisis. But why would it want to? Most U.S. experts believe that Russia does not view a North Korean nuclear state as a serious threat to Russia itself.¹ Also, the abysmal state of U.S.-Russia relations—at the worst level since the 1962 Cuban Missile crisis—likely discourages Moscow from engaging in any cooperative dialogues with the United States over sanctions and other pressing matters relating to the DPRK’s militaristic behavior. Russia will not be anxious to carry America’s water in North Korea, although it has a good record of compliance with UN sanctions, much better than China’s. Certainly, North Korean outsourcing of military procurement and banking operations to China is much more extensive than to Russia. Also consider that the China-North Korea border is almost 900 miles long (about the distance from Boston to Chicago) offering incomparably broader vistas for smugglers than Russia’s 12 mile border with the North.

Nonetheless, Russia has powerful economic and security reasons for seeking at least a partial solution to the North’s nuclear problem. For example, core modernization projects planned earlier in the decade (but never implemented) would entrench Russia as a controlling force in the DPRK economy and provide unprecedented access to its valuable mineral resources. More importantly, the Trans-Korea projects would magnify Russia’s economic and political influence with South Korea and in Asian countries beyond. Additionally, Russia, like many other countries, doesn’t approve of the North’s nuclear weapons program—not so much from a fear of attack but from the North’s obvious disregard of the global nonproliferation regime. The onus of containing the North should fall mainly on the diplomatic skills and various influence factors of Russia and China. These are, of course, considerable.

If the United States could compartmentalize its messy relations with Russia in Europe and the Middle East and work with Russia to address the North Korean nuclear issue, the probability of containing and (ultimately) rolling back the North’s nuclear weapons program could be greatly improved. (Of course, with Kim in charge in the North, nothing is certain). The Trump administration might see value in this approach, both for the Koreans and for its overall Asian policies. To effectively cooperate with Russia, China, and other regional players on North Korea and gain consensus on the path forward could require the United States to modify some current hardline postures. Would any of this work? We can’t predict at this point, but if it doesn’t perhaps nothing will.

¹ Lukin, “Thinking Beyond China,” and Interview with Andrei Khlopkov, Washington, D.C., October 26, 2016.

APPENDIX A:

ROLLING BACK SOUTH AFRICA'S NUCLEAR WEAPONS PROGRAM

The situation for South Africa in the early 1970s had become increasingly unstable. Portugal had withdrawn from its African colonies of Angola and Mozambique, creating a power vacuum that the Soviet Union and its allies seemed all too eager to fill. Soviet agitation, along with Cuban troops in Angola, weighed heavily in South Africa's security calculations. By the middle of the 1970s, South Africa began to fear that the United States and the United Kingdom were backing away in their support for South Africa as a bulwark against communism in Africa. This fear led to a "bunker mentality" in which South Africa felt surrounded by enemies and abandoned to defend itself. Relations with South Africa continued to deteriorate following the 1976 Soweto riot and a wide range of problems related to apartheid.

In parallel with South Africa's increasing political isolation, the United States, along with other nuclear weapons states, began to apply unilateral restrictions on nuclear materials, information, and technology in an attempt to deny South Africa sensitive nuclear technology. With the enactment of the Nuclear Non-Proliferation Act by Congress in 1978, U.S. pressure against the South African nuclear program peaked. Largely as a result of increasing pressure and a sense of isolation, South Africa decided to establish a completely autonomous nuclear fuel cycle as well as to proceed with and expand its nuclear weapons program. In early 1979, South Africa covertly produced its first nuclear weapon. By the beginning of the Reagan administration, it was clear that South Africa had become a *de facto* nuclear weapon state.

The Reagan administration instituted a policy of constructive engagement with South Africa with the objective of forming a less antagonistic relationship and persuading the South African government to move toward political reform. This policy was also applied to the nuclear trade by relaxing some of the previous export control restrictions on South Africa while maintaining pressure to limit its nuclear weapons development and manufacture. The willingness of the U.S. to engage in a constructive dialog while maintaining restrictions to limit South Africa's nuclear capabilities encouraged the government of South Africa to begin negotiations with the nuclear weapons states on the possibility of it signing the Non-Proliferation Treaty (NPT).

In the late 1980s, South Africa concluded peace settlements with both Angola and Namibia. Additionally, the influence of the Soviet Union was waning in Africa and globally. In its own time, South Africa became convinced that nuclear weapons were a liability and decided to rid itself of the weapons it had already produced and accede to the NPT. In 1990, South Africa ordered destruction of its nuclear weapons and closed its facility for production of highly enriched uranium.

After a series of discussions with officials of the International Atomic Energy Agency, South Africa acceded to the NPT on July 10, 1991, and on September 16, 1991, it signed a comprehensive safeguards agreement with the IAEA. It was only later, on March 24, 1993, that South African President Frederik Willem de Klerk announced publicly that South Africa had constructed and subsequently dismantled seven gun-assembled nuclear devices.

IAEA safeguards inspectors along with nuclear weapons experts undertook the task of assessing the status of South Africa's nuclear weapons program and ascertaining that all nuclear material involved in that program had been recovered and placed under IAEA safeguards. As a result of months of detailed verification activities, the IAEA was able to conclude that there were no indications to suggest that the inventory of nuclear material was incomplete or that the South African nuclear weapons program had not been completely terminated and dismantled. South Africa is the only state to have forsworn nuclear weapons after having actually developed and produced them.

The U.S. decision to develop a less antagonistic approach toward South Africa, along with the reduction of existential threats from the Soviet Union, was a key element in producing political change. The orders to close its high enriched uranium plant and destroy its completed nuclear devices were issued virtually in parallel with the decisions to liberalize and open South African society. In 1990, the ban on the African National Congress party was lifted, and Nelson Mandela was released from prison. In 1994, Mandela became South Africa's first black president, forming a multi-ethnic government. By changing our approach, could the United States encourage similar progress in North Korea?

While there are many lessons that may be learned from the roll back of South Africa's nuclear weapons program, the following seem to stand out:

- When a country's determination to develop nuclear weapons is driven by perception of a powerful threat against its security, sanctions may do little to stop that program until the perceived security threat is diminished.
- Increasing pressure is unlikely to reduce a proliferating country's nuclear weapons program. Such pressure may only serve to increase that state's determination to acquire nuclear weapons.
- Maintaining restrictions while engaging constructively is key to the ultimate resolution of such issues.



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