

North Korea's Nuclear Test and Prospects for the Comprehensive Test Ban Treaty

Heather Williams¹

Abstract

For decades, North Korea has used nuclear weapons to achieve its political and military objectives, such as securing the regime, deterring perceived adversaries, and gaining political leverage. Pyongyang may view the requirement for its ratification of the Comprehensive Test Ban Treaty (CTBT) as a bargaining chip and jeopardize the success of the treaty and its entry into force (EIF). The international community can try to prevent North Korea from holding the CTBT hostage with alternatives to the current EIF mechanism. This paper examines three primary questions for policy consideration. First, what was the motive for North Korea's second nuclear test? Second, what are the implications of the test for U.S. nonproliferation goals and the CTBT? And third, what are other options for and alternatives to EIF that may mitigate the utility of nuclear weapons to the Kim regime? The analysis concludes that the marginal benefits of negotiating with North Korea may not be worth the associated political and diplomatic costs to the Obama administration and alternatives for bringing the CTBT into force and solidifying the norm against nuclear testing should be explored as more attractive options.

¹ Heather Williams is a Research Associate at the Institute for Defense Analyses (IDA) in Alexandria, VA. Ms. Williams received her B.A. from Boston University in International Relations and Russian Studies, and her M.A. from The George Washington University in Security Policy Studies. Prior to working at IDA she worked for Analytic Services, Inc., and supported the Office of the Secretary of Defense Chemical and Biological Defense Program. The views expressed in this paper are entirely her own and do not reflect those of IDA or any of its DoD sponsors.

Introduction

For decades, North Korea has used nuclear weapons to achieve its political objectives, such as securing the regime, deterring perceived adversaries, and gaining political leverage. On May 25, 2009, North Korea conducted what is assumed to be its second nuclear test, with a yield of approximately 3 kilotons (kt).² Along with its nuclear testing activities, North Korea refuses to rejoin the Six Party talks and Nuclear Non-Proliferation Treaty (NPT), and relies heavily on illicit arms sales to states including Iran and Syria to bankroll the regime's activities. These activities challenge and jeopardize the credibility of the nonproliferation regime while threatening regional stability. The latest nuclear test may not be the last, and the international nonproliferation regime is running out of options for dealing with the Hermit Kingdom.

Pyongyang may view the requirement for its membership to the Comprehensive Test Ban Treaty (CTBT) as a bargaining chip and jeopardize the success of the treaty and its entry into force (EIF). North Korea's behavior is reminiscent of Thomas Schelling's observation over 40 years ago, that "the power to hurt is bargaining power," and the latest nuclear test is a strong statement and reminder from Pyongyang that it still has the power to hurt.³ North Korea has seized on Schelling's observation and will accrue and abuse bargaining power at any opportunity, even at the risk of being a pariah state. Alternatives to the current EIF mechanism would deny North Korea of additional leverage while still pursuing the potential benefits of a CTBT.

This paper examines three primary questions. First, what was the motive for North Korea's second nuclear test? Second, what are the implications of the test for U.S. nonproliferation goals and the CTBT? And third, what are other options for and alternatives to EIF that may mitigate the utility of nuclear weapons to the Kim regime? In attempting to answer these questions, the analysis does not intend to

² Unlike the 2006 test, the CTBT Organization (CTBTO) did not detect radioactive particles following the 2009 test, therefore it cannot be conclusively labeled a "nuclear" test. Based on seismic data and North Korea's admission to conducting a nuclear test, however, it is assumed with a high degree of certainty to have been a nuclear test and is treated as such by the CTBTO and international community. See "CTBTO's Initial Findings on the DPRK's 2009 Announced Nuclear Test," May 25, 2009, <<http://www.ctbto.org/press-centre/highlights/2009/ctbtos-initial-findings-on-the-dprks-2009-announced-nuclear-test/>>.

³ Thomas C. Schelling, *Arms and Influence* (Yale University Press, 1966), 2.

argue for or against U.S. ratification of the CTBT, nor does it assume to understand the psycho-political machinations of Kim Jong-il. The paper does, however, attempt to distill the political utility of nuclear weapons to the Kim regime based on its security concerns, past behavior, and nuclear activities.

Motives for Testing

North Korea could perceive at least four potential gains from nuclear testing, none of which are mutually exclusive. First, additional testing would yield technical improvements to assist the work of its nuclear scientists and engineers. Second, and perhaps most importantly, nuclear weapons are a symbol of the Kim regime's domestic control, and the latest test came at a time of great uncertainty over dynastic succession within North Korea's power structure. Third, North Korea relies on nuclear testing to bolster its ability to deter adversaries in what it considers to be a threatening security environment. And fourth, Kim Jong-il has learned from past experience that he can use nuclear weapons as leverage to gain international attention and economic concessions. This analysis is based on observations about the Dear Leader's past behavior and poses the question: what is the view from Pyongyang? Since the regime is notoriously closed and opaque, any analysis of Kim's decision-making is, admittedly, speculative.

Testing for Technical Improvement

States throughout history have often tested nuclear weapons for technical purposes. Testing provides data on the effectiveness of new weapon designs or safety measures, along with an opportunity to foster the human capital required to develop nuclear weapons. North Korea first tested a nuclear device in 2006, with a yield of less than 1 kt. Since this first nuclear test appears to have been a fizzle that failed to produce the intended yield, it is plausible that North Korea's second test was intended to remedy errors in the first design or to assist in the development of a smaller warhead to mount on a ballistic missile.⁴ Prior to the May 2009 test, North Korea informed China that it anticipated a yield of 4 kt, suggesting that the second test was not a complete success either, and leaving open the possibility of additional

⁴ Mary Beth Nikitin, Mark E. Manyin, Emma Chanlett-Avery, Dick K. Nanto, and Larry A. Niksch, "North Korea's Second Nuclear Test: Implications of U.S. Security Council Resolution 1874," *CRS Report for Congress*, R40684, July 1, 2009, 11.

testing to resolve technical issues.⁵ While North Korea appears to have benefited from the second test, as demonstrated by the higher yield, its motives were likely more political than technical, as discussed below. In this sense, North Korea is somewhat of an historical anomaly, and challenges the CTBT's assumption that states want to prevent detection of nuclear testing activities.

Testing for Regime Security

The context of the 2009 nuclear test sheds light on potential political motives and suggests regime security was a driving factor. In addition to the nuclear test in May 2009, North Korea also tested a missile in April; identified Kim's likely successor, his third son, Kim Jong-un, in June; launched a new economic policy in November that revalued the currency to punish the merchant class in an attempt to crack down on the black market; and continued with its vitriolic language and threats against the United States. Nuclear weapons play into Kim's broader strategy of regime survival, as identified by General Walter L. Sharp, Commander, United States Forces Korea: "Kim Jong-il's strategic goal is the survival and continuance of his regime. North Korea's efforts to build a nuclear weapons program have become the key component of its strategy to guarantee regime survival."⁶

North Korea is facing a period of domestic political instability due to its ongoing economic and succession crises, leaving the regime weaker than it has been in over a decade.⁷ North Korea's domestic woes are well known: its economy is entirely dependent on China, its population suffers from chronic food shortages, and the recent currency revaluation wiped out personal savings and crushed the merchant class. Pyongyang may very well share former Secretary of State Henry Kissinger's recent assessment that the "[g]reatest risk to Pyongyang is not foreign aggression but internal collapse."⁸ Since Kim Jong-il's stroke two years ago, the future of the regime has been called into question and a smooth succession is not assured.⁹ Kim's

⁵ As cited in Jonathan Medalia, "Comprehensive Test Ban Treaty Background and Current Developments," *Congressional Research Service*, RL33548, January 6, 2010, 2.

⁶ Walter L. Sharp, Statement to the House Appropriations Committee, MILCON/Veteran's Affairs Subcommittee, March 24, 2010, 5.

⁷ Stephan Haggard and Marcus Noland, "Sanctioning North Korea: The Political Economy of Denuclearization and Proliferation," Working Paper for the Peterson Institute for International Economics, WP 09-4, July 2009, 2.

⁸ Henry Kissinger, "How to make progress on North Korea," *Washington Post*, December 18, 2009, A31.

⁹ Hui Zhang, "Don't Play Nuclear Chicken with a Desperate Pariah," *Foreign Policy*, June 20, 2009.

own rise to power was not without its tribulations. Like his own heir, Kim lacked the military and leadership experience of Kim Il-sung, which led to open criticism of his right to rule, an assassination attempt in July 1994, and an aborted mutiny.¹⁰ Kim's goal is to spare his heir from a similar internal power struggle and to secure the regime long after his death.¹¹

To shore up the regime and bequeath his heir with a cult of personality, Kim is using military demonstrations as symbols of the regime's greatness. Many analysts argue the North Korean elite are as eager as Kim to see the regime survive in order to preserve their privileges and status.¹² Others, such as South Korean experts interviewed in a recent *New York Times* article, observe "The signs are that the elite do not take Kim Jong-un seriously." In fact, these experts interpret the recent sinking of a South Korean warship, widely believed to be the result of a North Korean torpedo, as an attempt to demonstrate military prowess and win the support of the military for Kim's successor.¹³ If Kim is launching a campaign to garner elite support, demonstrations of the North's military capability, including nuclear tests, may well continue until the domestic political crisis is resolved.

Similar to a military parade through Kim Il-sung Square, a nuclear test puts on display the North Korean arsenal as a source of pride. As such, the regime is heavily invested in continuing the program and is unlikely to concede to foreign pressure to abandon its nuclear activity.¹⁴ Nuclear weapons are a validation not only of Kim's personal greatness, but of the Kim dynasty as a whole. Jacques Hymans offers a political psychology perspective of the regime's reliance on nuclear weapons:

There is an unmistakable psychological dimension to nuclear proliferation decisions, not just in North Korea....Leaders who are 'oppositional nationalist'¹⁵ are uniquely tempted by the prospect of

¹⁰ Christian Caryl, "Multiple Personality Disorder in Pyongyang," *Foreign Policy*, April 19, 2010.

¹¹ Kongdan Oh and Ralph Hassig, "Putting Together the North Korea Puzzle," *Foreign Policy Research Institute E-Notes*, June 2009.

¹² Mun Suk Ahn, "After Kim Jong-il," *Bulletin of Atomic Scientists*, November 16, 2009.

¹³ Martin Fackler, "North Korea Seems to Tap An Enigma As an Heir," *New York Times*, April 25, 2010, A6.

¹⁴ Jeffrey Goldstein, "Analysis: Nuclear Weapons and North Korea's Nuclear Test," *Bulletin of Atomic Scientists*, May 26, 2009

¹⁵ As defined by Hymans, "Oppositional nationalists are people who combine a deep-rooted fear of a foreign enemy with an intense pride in their nation's potential to face the enemy down." See Jacques

acquiring the bomb. Oppositional nationalists' conception of their nation fuses the powerful emotions of fear and pride. This explosive psychological cocktail drives them to pursue the 'absolute weapon' with great determination.¹⁶

Hymans goes on to argue that any U.S. policy must recognize that Kim acts "not from his head, but rather from his heart," and is desperate to entrench the regime's hold on power.¹⁷

Testing for Deterrence

For a dictatorship such as North Korea, regime security is inextricably tied to the deterrence function of nuclear weapons. One objective of this analysis is to consider the view from Pyongyang, which may include perceptions of looming, existential threats. As Kongdan Oh and Ralph Hassig observed, "When threatened a porcupine sticks out its spines. This is the Kim regime's customary response to a hostile world, because weapons and threats are all the regime has to work with."¹⁸ With a large U.S. military presence in the region and the label of pariah state, North Korea is very much so in a "hostile world," and the Kim regime and its military supporters are eager to convince the international community that it is not an easy target for invasion and regime change. The regime remains particularly sensitive to the "axis of evil" label and may believe that if Iraq possessed nuclear weapons in 2003, the United States would not have invaded and overthrown Saddam Hussein's regime. North Korean statements made prior to the 2006 test confirm this assessment, as when the regime stated its intent to test to "bolster its deterrent for self-defense" in response to the growing threat from the United States.¹⁹ In a more recent statement the regime announced that it "manufactured nuclear weapons for self-defense to cope with the Bush administration's ever more undisguised policy to isolate and stifle North Korea."²⁰

Hymans, *Psychology of Nuclear Proliferation: Identity, Emotions, and Foreign Policy* (Cambridge University Press, 2006).

¹⁶ Jacques Hymans, "Discarding tired assumptions about North Korea," *Bulletin of Atomic Scientists*, May 28, 2009, 2.

¹⁷ Ibid.

¹⁸ Oh and Hassig, "Putting Together the North Korea Puzzle."

¹⁹ "Analysis: North Korea close to nuke test," UPI, October 5, 2006.

²⁰ As cited in Medalia, "Comprehensive Nuclear Test Ban Treaty."

Testing for Political Leverage

Based on past experience, North Korea stands to achieve significant political, diplomatic, and economic concessions by testing a nuclear weapon. North Korea has already achieved political benefits by using nuclear weapons as a bargaining chip for aid.²¹ Figure 1 shows the cycle of past behavior in using nuclear weapons to gain concessions.

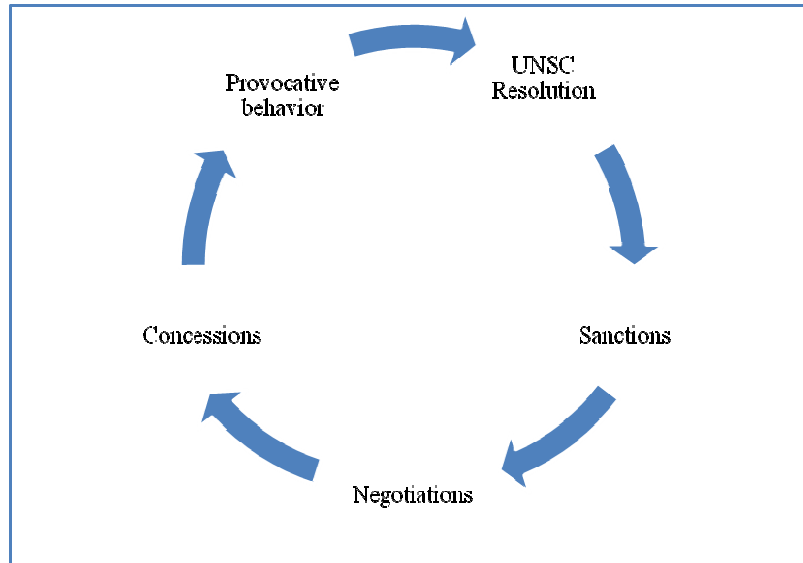


Figure 1: North Korea's Cycle of Past Behavior

In this cycle, North Korea conducts an act of aggression, such as a nuclear test, and the international community struggles to build consensus in the UN Security Council (UNSC) for sanctions. Ideally, sanctions will force North Korea to the negotiating table, where it eventually demands economic concessions and aid in exchange for promises to refrain from furthering its nuclear program. North Korea has broken these promises every time, and the latest nuclear test may be another step in this cycle. Kissinger warns that “If this pattern continues, diplomacy will turn into a means of legitimizing proliferation rather than arresting it.”²² The international community with U.S. leadership will be challenged in pursuing nonproliferation

²¹ Ahn, “After Kim Jong-il.”

²² Kissinger, “How to make progress on North Korea.”

objectives while at the same time convincing Pyongyang that this cycle of past behavior cannot succeed nor result in security assurances.²³

Impact of North Korea's Testing Activities on the CTBT and U.S. Nonproliferation Goals

Challenges to Entry-into-Force

North Korea presents one of many challenges, if not the greatest, to the CTBT, because as currently written, EIF depends on North Korean cooperation. Annex 2 of the CTBT lists the 44 states with nuclear capabilities when the treaty was first opened for signature in 1996. Of these 44, three countries have yet to sign the treaty – India, North Korea, and Pakistan – and six others have signed but not yet ratified – China, Egypt, Indonesia, Iran, Israel, and the United States. Of these hold-outs, Indonesia recently initiated its internal ratification process and Chinese officials have hinted in off-the-record discussions that they would do the same. But even with these two additional members, EIF will remain a significant challenge.

North Korea has demonstrated in the past its ability to use treaty noncompliance as a means to gain diplomatic leverage, as it did with the NPT. Revisiting Figure 1, the CTBT would easily fit into this cycle of behavior. In one plausible sequence of events, the United States would ratify the CTBT and pursue EIF, and other, if not all, required members would join, with the exception of North Korea. North Korea may even continue to test nuclear weapons, prompting debate in the UNSC. Consequently, the international community may pressure North Korea to sign and ratify the CTBT, in which case Pyongyang would demand aid and concessions. In this sequence of events, the international nonproliferation regime delivers leverage to North Korea and jeopardizes its own cause. The United States is potentially walking into a diplomatic and political trap wherein North Korea has the power to manipulate the international community.

²³ Goldstein, “Analysis: Nuclear Weapons and North Korea’s Nuclear Test.”

U.S. Leadership

On multiple occasions, the Obama administration has committed itself to pursue ratification of the CTBT, most recently in the Nuclear Posture Review.²⁴ The next step for the administration is to lay the groundwork for the Senate vote. The Senate first voted on the CTBT in 1999 with minimal preparation by the Clinton White House, and amidst a turbulent political atmosphere, ratification was defeated by a vote of 51 to 48. A decade later, the CTBT remains one of the most hotly debated topics in the nuclear community, as evidenced by the Final Report of Strategic Posture Commission, which found consensus on all topics under its purview with the exception of the CTBT. This paper does not attempt to argue in favor of or against ratification, but it does attempt to put the CTBT into political context and, as such, the analysis is strengthened by a brief examination of arguments in the CTBT debate.

Supporters argue CTBT ratification is an opportunity for the United States to lead in consensus-building and strengthening the nonproliferation regime. For example, Joshua Pollack argues that the CTBT is a “litmus test of good faith in nonproliferation diplomacy.”²⁵ Non-nuclear-weapon states continue to press the United States for a binding demonstration of its commitment to pursue disarmament, captured in NPT Article VI, and specifically CTBT ratification. Other benefits to U.S. ratification, as argued by arms control advocates, include that it would strengthen the international opprobrium against testing and deter additional testing. U.S. membership to the CTBT would put increasing pressure on hold-outs such as North Korea. The 2009 Council on Foreign Relations Task Force on nuclear weapons noted that the most immediate benefit of EIF would be prevention of competitive testing in contentious regions, such as South Asia, and that “the entry into force of the CTBT would also deter a state from conducting tests as a form of blackmail, intimidation, or political posturing.”²⁶ Among CTBT supporters and opponents alike, there is debate about what determines the treaty’s effectiveness and whether or not complete EIF, as written in the treaty, is necessary to derive some of its benefits. This issue is discussed in further detail in the examination of EIF alternatives.

²⁴ U.S. Department of Defense, *Nuclear Posture Review*, (Washington, DC: 2010), 13.

²⁵ Pollack, Joshua, “Time for a test-ban bargain,” *Bulletin of Atomic Scientists*, November 30, 2009.

²⁶ Council on Foreign Relations, *U.S. Nuclear Weapons Policy* (Washington, DC: 2009), 55.

Opponents to the CTBT point to North Korea as a reason to oppose the treaty's ratification. In an October 20, 2009, op-ed to the *Wall Street Journal*, Senator John Kyl listed reasons to reject the CTBT relating to North Korea, aside from his concerns about the treaty's impact on the U.S. stockpile. First, the CTBT International Monitoring System (IMS) failed to detect a radionuclide signature following North Korea's 2009 test, suggesting the system is not reliable and that the treaty may not be verifiable in future situations when seismic data is inconclusive. Second, the international community has failed to fully implement the NPT, as evidenced by North Korea; therefore, there is no reason to expect it to uphold other agreements, such as the CTBT.²⁷ Other opponents, such as those on the 2009 Strategic Posture Commission, argue that, as the treaty is unlikely to ever enter into force, U.S. ratification would jeopardize the U.S. deterrent as "the United States would follow the letter of CTBT restrictions, although the treaty is unlikely ever to take effect."²⁸

Were the Obama administration to make a convincing case and the U.S. Senate did ratify the CTBT, the next step would likely be to pursue full or early EIF. Supporters argue that this would yield additional benefits beyond those of U.S. ratification, such as limiting vertical nuclear proliferation and preventing a qualitative arms race in countries such as Russia, China, India, and Pakistan. EIF would allow for increased verification measures, including on-site inspections (OSI), and would contribute to the NPT system of norms. North Korea, however, is likely to demand economic concessions, fuel supplies, and other aid to even consider joining and enabling EIF. The Obama administration and international community must determine at what political and diplomatic cost and risk it will pursue EIF and if they are willing to accept alternatives.

Entry-into-Force Options

There are practical and legal alternatives to the current EIF mechanism. The ideal scenario, of course, is for all 44 Annex 2 states, including North Korea, to join. Convincing North Korea to sign and ratify, so long as the current cycle of behavior

²⁷ Jon Kyl, "Why We Need to Test Nuclear Weapons," *Wall Street Journal*, October 20, 2009.

²⁸ U.S. Strategic Posture Commission, Final Report (Washington, DC: 2009), 83. Of note, the Commission did not come to a consensus on the CTBT and the quotation reflects only the opinions of those in opposition to CTBT ratification.

continues, seems to be the least likely option. That is not to say it should be dismissed outright. There remain options for pressuring North Korea, such as the use of financial sanctions to gain leverage, as were used in the Banco Delta Asia case.²⁹ With this being one of the only success stories, however, the toolkit for pressuring North Korea is lacking. North Korea has earned the moniker of the “Hermit Kingdom” because it is highly suspicious of the intentions of other states and participates in the international community on a minimal basis, significantly limiting negotiating options. U.S. overtures to such an end are perceived as challenges to regime survival.³⁰

An additional challenge to opening negotiations with North Korea is the sequence of denuclearization and pursuing CTBT entry into force. Negotiating with North Korea on the CTBT prior to denuclearization would risk *de facto* recognition of North Korea as a nuclear-armed state. Japan and South Korea, which strongly support the CTBT, have not pushed for North Korean ratification because they are opposed to accepting a nuclear North Korea.³¹ North Korea may demand nuclear recognition or security assurances to negotiate on the CTBT, which the U.S. and its allies would be unwilling to accept. Therefore, the nonproliferation regime would be well-served to consider alternatives to the current EIF mechanism.

The first alternative is to rewrite the CTBT. Changes to the EIF mechanism or list of required Annex 2 states would bypass the necessity of North Korean acquiescence. One such method would be for the States Parties to write an authentic interpretation, which would serve as an additional clause to the treaty. For example, an authentic interpretation could clarify that the treaty will enter into force after a specified period of time regardless of whether or not all Annex 2 states are members, or that the treaty will enter into force once all permanent members of the UNSC (P-5), which are also the five recognized nuclear weapon states under the NPT, sign and ratify the CTBT. This is also an unattractive option, however, because rewriting or adding to the treaty would require agreement by all 182 signatories. Revisiting the original text would open it up to other criticisms, such as ambiguity in the treaty language on defining a nuclear test, and jeopardize the treaty as a whole.

²⁹ Haggard and Noland, “Sanctioning North Korea: The Political Economy of Denuclearization and Proliferation,” 23-24.

³⁰ Oh and Hassig, “Putting Together the North Korea Puzzle.”

³¹ Kaegan McGrath, Stephanie Bobiak and Jean du Preez, “The Future of the Nuclear Test Ban Treaty: The Good, the Bad, and the Ugly,” Center for Nonproliferation Studies, March 7, 2008.

A second alternative is provisional application. The Law of Treaties allows for the provisional application of treaties if “the negotiating States have in some other manner so agreed,”³² and there is a legal precedent for the provisional application of treaties, such as the Energy Charter Treaty.³³ Provisional application would require a written agreement among members, as was suggested and supported by a 2006 UN Commission, to commit to observe the treaty indefinitely regardless of its EIF and to clarify whether or not provisional application would include OSI.³⁴ The Strategic Posture Commission offered a similar recommendation: provisional application among the UNSC P-5. While the Commission could not come to a consensus on CTBT ratification, it did agree that the Obama administration should “define a diplomatic strategy for entry into force . . . and acknowledging the expected long delay in actual entry into force of the treaty, the United States should secure agreement among the P-5 to implement the CTBT verification provisions without waiting for entry into force of the treaty and to agree to an effective process among the P-5 to permit on-site inspections.”³⁵

A third option is practical EIF, by which members agree to observe the treaty without its entry into force or a formal agreement. This option is the path of least resistance, as it is the closest to the status quo. Practical EIF without a formal agreement would likely require foregoing the option of OSI, but would still allow members to utilize the IMS and develop national implementation measures. Aside from OSI, the CTBT’s verification system is already in place and nearly complete. States Parties can utilize the system regardless of whether or not the CTBT is in force. This option is also supported by the Law of Treaties: “A State is obliged to refrain from acts which would defeat the object and purpose of a treaty when: (a) it has signed the treaty . . . (or) (b) it has expressed its consent to be bound by the treaty, pending the entry into force of the treaty and provided that such entry into force is not unduly delayed.”³⁶ Essentially, any state that has signed the CTBT has agreed not to violate the treaty whether or not it is ratified or enters into force. Without the membership of the United States and China, however, practical EIF would lack

³² Law of Treaties, Part II Article 25.

³³ For more on the case study of the Energy Charter Treaty, see Andrew Hutcheon and James Spencer, “Provisional Application of the Energy Charter Treaty,” *Global Arbitration Review: the European and Middle Eastern Arbitration Review*, Section 3 (2008).

³⁴ Matishak, Martin, “Nuclear Test Ban Could Become Reality Without North Korea, Experts Say,” *Global Security Newswire*, June 4, 2009.

³⁵ Strategic Posture Commission, 87.

³⁶ Law of Treaties, Part 2, Article 18.

sufficient credibility to reap the highest potential gain from the CTBT and integrate it into the system of norms used to pressure hold-outs.

Role of China

As a recognized nuclear weapon state under the NPT, a member of the P-5, and North Korea's primary ally, China's participation will be required in almost any scenario to either negotiate with North Korea or to pursue alternatives to EIF. North Korea depends on China for 90% of its oil, 80% of its consumer goods, and 45% of its food, affording Beijing economic leverage over Pyongyang.³⁷ China is increasingly challenged in balancing its responsibilities as a rising global power with its commitment to stability on the Korean peninsula.³⁸ Any transition of power in Pyongyang or period of instability in the region could jeopardize China's economic growth; therefore, it is likely to be actively engaged in influencing both the nonproliferation regime and North Korea.³⁹ China appears to be taking a harsher stance to North Korea since the 2006 nuclear test, for example when it supported harsher sanctions in 2009. Any course of action by the United States will require partnership with China and recognition of both China's delicate regional position and its role as North Korea's primary trading partner.

Conclusion

In conclusion, the political and diplomatic costs to the Obama administration may not be worth any marginal benefits of negotiating with North Korea on the CTBT, but other options may succeed in bringing the treaty into force and solidifying the norm against nuclear testing in the nonproliferation regime. On the current trajectory, North Korea will inhibit the United States and the international nonproliferation regime in achieving their goals by withholding its membership to the CTBT. Nuclear weapons are seen as an existential necessity by the Kim regime and nuclear testing is a political tool for securing the regime, deterring aggressors, and gaining political leverage. Pyongyang is not likely to give up this tool in the near future, if ever. By

³⁷ Ibid.

³⁸ Scott Snyder, "China-Korea Relations: Pyongyang Tests Beijing's Patience," *Comparative Connections*, July 2009.

³⁹ Jayshree Bajoria, "The China-North Korea Relationship," Council on Foreign Relations, July 21, 2009.

achieving alternatives to the current EIF mechanism, the nonproliferation community can deprive North Korea of additional leverage – contributing to the nonproliferation system of norms and promoting regional stability. Based on expert recommendations and analysis, provisional application and practical EIF are the strongest candidates for EIF alternatives.