

## Should South Korea Go Nuclear?

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### I. SUMMARY

Relative to the status quo of relying on US nuclear extended deterrence, the ROK developing and deploying its own nuclear weapons, or, arranging for redeployment of US nuclear weapons into Korea, are fantastic ideas. The latter options would reduce the credibility of US retaliation in response to a DPRK nuclear first strike, and would undermine the robustness of conventional deterrence, including conventional deterrence extended by the United States, to the ROK. The damage to ROK vital national interests from attempting to match the DPRK's nuclear breakout would be far greater than putative gains, including loss of nuclear energy security; reduced access to trade, finance, and investment markets; irreparable damage to the ROK's reputation for diplomatic prowess; potentially the rupture of the US alliance; the drawing of nuclear fire from other nuclear weapons states onto the ROK; and most important, the creation of an inherently unstable and permanent nuclear standoff with the DPRK described best as "mutual probable destruction." In short, South Korea should not go nuclear.

After North Korea tested a third nuclear device on February 12, 2013, many South Koreans felt helpless, frustrated, even outraged. An opinion poll conducted by the Asan Institute for Policy Studies immediately before the test revealed that 66 percent of respondents supported South Korean development of its own nuclear weapons. After the test, over 70 percent of respondents favored nuclear weapons development.

Such pro-nuclear attitude is not confined only to the general public. Chung Mong-joon, seven-term National Assembly member of the ruling Saenuri Party, conservative candidate for Mayor of Seoul, and a front-runner in South Korea's next presidential election, has been one of the most vocal advocates of "go nuclear". *Chosun Ilbo*, the most influential conservative daily newspaper in South Korea, has also campaigned for the nuclear cause. In short, there is growing support for this radical shift in the ROK's political and military posture at popular and elite levels.

A recent debate in the United States has further complicated the dialogue in Korea. In the February issue of *The National Interest*, David Santoro, a nonproliferation specialist, wrote that US global nuclear non-proliferation goals must override alliances, if necessary, ending them altogether. Santoro was challenged by Elbridge Colby who argued that the United States instead should "Choose Geopolitics Over Nonproliferation" and accommodate allies such as Korea if they go nuclear.

Ironically, Colby's view gave new hope to South Korea's conservatives by hinting that alliance and nuclear weapons' possession might be compatible. In the past, fear of losing alliance with the United States gave them pause in pursuing nuclear weapons.

Why, one might well ask, are these South Koreans so obsessed with nuclear weapons now? They offer several rationales.

First, they argue that North Korea has already become a nuclear weapons state, altering balance of power on the Korean peninsula. Only gaining a credible, symmetric nuclear deterrence capability can restore this balance.

Second, they suggest that nuclear weapons would endow South Korea with a bargaining chip to compel North Korea to abandon its nuclear weapons. Or, it could push China to put much more pressure on North Korea out of fear that South Korean proliferation would result in Japanese nuclear weapons.

Third, they doubt the credibility of American extended deterrence, nuclear and conventional. Some are skeptical that the United States would use nuclear weapons when and if the North posed an existential or lesser nuclear threat to the ROK. Thus, they argue that South Korea should have its own nuclear deterrent capability to substitute for dwindling or ineffective US nuclear deterrence.

Finally, enduring distrust of China, Russia, and Japan serves as another catalyst for pro-nuclear sentiment. China, Russia, and North Korea already have nuclear weapons. And recent strategic moves by the Abe government suggest to many South Koreans that it is simply a matter of time before Japan joins them. They fear it that South Korea might be the only non-nuclear state left in the region, dependent *and* insecure.

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## **II. Disadvantages of Independent South Korean Nuclear Weapons**

In contrast, we argue that the nuclear weapons option, be it by domestic development or by re-deployment of US tactical nuclear weapons, is neither feasible nor desirable for South Korea. As we shall see, its feasibility is very low because of severe political, legal, and institutional obstacles and above all, credibility problems. The military result also would be undesirable: two small states armed with nuclear weapons in an unstable “mutual probable destruction” relationship. Each would have incentive to use first their nuclear weapons rather than lose them. South Korean nuclear weapons would induce a rigid and permanent (until it failed) psychological warfare even more ferocious than that seen over the last six decades.

Far from reinforcing South Korea’s already overwhelming offensive military capabilities—including in almost every dimension where North Korea has developed offsetting “asymmetric” capabilities—South Korean nuclear weapons would undermine deterrence based on conventional forces, and even reduce South Korea’s ability to use its conventional forces in response to a North Korean attack.

The complications that independent South Korean nuclear weapons would cause for UN Command and Combined Forces Command are manifold. Put simply, no US Commander-in-Chief is going to put American forces in harm’s way in Korea if South Korea wields nuclear weapons outside of US political and military command-and-control.

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## **III. Legal and Institutional Obstacles**

The ROK would face very high costs were it to move in this direction because it is deeply embedded in multilateral and bilateral treaty commitments and nuclear energy supply trading networks. South Korea is a member of the Nuclear Non-Proliferation Treaty (NPT), and therefore cannot receive, manufacture or get any assistance to produce nuclear explosive devices or weapons under Article 2. It is also obliged to comply with the safeguard regulations of the

International Atomic Energy Agency. Seoul would have to emulate Pyongyang and leave the NPT and the IAEA.

But unlike North Korea which had almost no external nuclear ties or market relations to lose, South Korea is highly involved in global markets with Koreans serving as UN Secretary General and World Bank president. Pulling out of the NPT and the IAEA might lead to UN action, possibly UN Security Council sanctions as were imposed on the DPRK, as well as national sanctions. It would certainly end South Korea's reactor exports and likely also supply of uranium, enrichment services, and other materials and dual use technology needed for South Korea's nuclear fuel cycle from the Nuclear Supply Group such as the United States, Australia, Russia, and France. Within a few years, South Korea would face an even larger power shortfall than Japan had to deal with after shutting down all its nuclear plants in 2011.

Also, Washington would likely reject not only Seoul's request to reprocess or pyro-process spent nuclear fuel, but also its desire to enrich uranium, even for research. IAEA alarm bells will sound loudly the moment such proliferation activity commences, not least due to the Agency's experience with South Korea's enrichment research and development.

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#### **IV. What About Re-Deploying US Tactical Nuclear Weapons?**

Could the ROK ask the United States to re-deploy nuclear weapons instead of embarking on an independent nuclear armament? Such redeployment is not inconceivable. However, considered carefully, the idea of redeploying US tactical nuclear weapons is as fantastic as South Korea going it alone.

First, a few air-delivered nuclear weapons based in Korea would add little to deterrence and pose the same use-them-or-lose-them dilemma as would South Korean nukes. Second, since Obama's 2009 Prague speech articulating a vision of a 'nuclear weapons-free world,' the United States has downplayed the role of nuclear weapons in every aspect of its security posture. Third, far from asserting South Korea's military prowess against the North Korea's nuclear weapons, these weapons would symbolize its renewed subordination to the US military and would simply confirm the North Korean (and in some quarters) Chinese view that South Korea's military follows American bidding.

Amidst draconian fiscal austerity, it is also highly unlikely that the United States would commit thousands of personnel and millions of dollars to re-deploying nuclear weapons to Korea. From the US perspective, the nuclear extended mission is supported already by its home-based strategic nuclear forces, and there is no reason to pay twice for such an improbable mission.

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#### **V. Political and Military Effects of Re-Deployment**

Even if the United States returned tactical nuclear weapons to the Peninsula, this would not help solve the North Korean nuclear conundrum. It would give Pyongyang a pretext to nullify the Six-Party Talks and accelerate and deepen its weapons program. China would move toward closer militarily to North Korea, aggravating South Korea's insecurities.

From a strictly military perspective, U.S. nuclear weapons based in South Korea are without merit. The first mission is to deter North Korean nuclear and conventional attack on South Korea. The essence of North Korea's deterrent force is its forward deployed military and ability to threaten northern Seoul with long range artillery and rocket fire. Kim Jong Un cannot hope to

attack the South and achieve military victory. The Demilitarized Zone represents a set of opposed, immense military masses, both deterred from moving against the other, and therefore trapped in an inherently stable and so far, permanent standoff, with or without nuclear weapons on either side.

Kim Jong Un's nuclear weapons capabilities provide at best little and likely no additional deterrence to that already sustained by his conventional forces. Indeed, we are skeptical that the logic of nuclear deterrence even applies with regard to North Korean military goals at this point. The combined probability of a North Korean missile-delivered nuclear warhead exploding over a target given all the systems that must work together—the rockets, the separating stages, the re-entry vehicle, the guidance system, the fuze, and the warhead itself—is likely less than 10 percent. If the North were to use a nuclear weapon, the DPRK would then face US-ROK and allied forces that would defeat the military in detail, dismember the regime, and kill or try its leadership for crimes against humanity and nuclear aggression. Russia and China could well join this campaign.

Even before the introduction of a complete kill-chain in 2020, South Korea's missile capability has significantly improved, and its air superiority with F-16s, F-15s, and eventually F-35s would allow more effective offensive defenses. When American conventional weapons assets are added, ROK-US combined forces are formidable. With complete control of North Korea's airspace, it would not take them long to occupy key sites in the DPRK, even if unconventional warfare lingered in mountainous areas for some months.

The second military mission is to deter and then defeat Kim Jong Un's forces on the assumption that he is only partly rational and launches an all-out attack on South Korea. Of course, if Kim Jong Un is truly irrational, then he is immune to deterrence, conventional or nuclear, in which case strictly military considerations based on uniquely nuclear weapons effects are what is important in evaluating their utility.

In this regard, we are skeptical that US tactical nuclear weapons are militarily usable, for the same reasons that they were opposed from within the US army in Korea (led by General Jack Cushman) in the mid-eighties in the debates that led in part to the global withdrawal of tactical and theater nuclear weapons in 1991. Authoritative analysis is available on the utter devastation that would be wrought by the use of nuclear weapons for military purposes in Korea. Use in places likely to slow a North Korean attack such as the invasion corridors would result in a vast radiological plume that would lay waste large parts of Korea. That mission would be better accomplished by air-launched precision-guided munitions.

If nuclear weapons were used to destroy the leadership, the United States and the ROK likely would also kill vast numbers of innocent North Koreans. Such an attack would be held by many, especially Koreans, to be disproportionate and reprehensible, even after North Korean nuclear first-use. It is also doubtful that the United States or South Korea would have real-time knowledge of the location of North Korea's leaders or weapons of mass destruction to use B61 bombs with precision and sufficient assurance that the mission would be achieved.

Ultimately, the question is whether redeployed US tactical nuclear weapons would have a marginal impact on the probability that *in extremis*, North Korea would play its nuclear card. Ironically, redeployment of US nuclear weapons would enhance the effectiveness of such risk-taking by the DPRK in its leaders' minds. It would play into North Korean "crazy as a fox" nuclear threats based on their perception that redeployment of US nuclear weapons increases the probability of US or North Korean nuclear pre-emptive attack. To be effective, this North Korean strategy demands that it increase the risk to the United States of prosecuting the war to

eliminate North Korea, not play it safe. This is not the military incentive we should be presenting to Kim Jong Un.

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## **VI. What About Credibility of US Nuclear Extended Deterrence?**

The most potent argument for an independent ROK nuclear weapons capability is that when the DPRK achieves a capacity to attack the United States itself, the credibility of its nuclear extended deterrent to the ROK will fall so much that it no longer suffices to reassure the ROK that it has a countervailing threat to neutralize the DPRK nuclear threat to the ROK. There is some substance in this argument, so it bears close consideration.

For many instances of provocation and military aggression, nuclear retaliation would be implausible either because the means of annihilation would be disproportionate or even militarily counter-productive on the battlefield; or could lead to moral and political condemnation by important third parties. Such flaws are passed onto allies by the United States when it extends nuclear deterrence, and cannot be evaded whether the adversary can hit the United States itself or not.

However, once an adversary like China in the mid-sixties or the DPRK in the future can plausibly threaten to hit the United States itself, the sheer magnitude of nuclear detonations—even if they are too few to threaten the United States national existence—could make the United States think twice about trading Guam for Seoul or Los Angeles for Tokyo. Thus, the relevant baseline is the credibility of the status quo of South Korea relying on nuclear extended deterrence based on US strategic nuclear forces based outside of Korea compared to the credibility of an independent South Korean nuclear weapons program from the viewpoint of the DPRK, and to a lesser extent, China.

It is important, therefore, to examine more closely the key elements that make nuclear threats “credible” and to compare the status quo of nuclear extended deterrence with a ROK nuclear weapons force in each of these respects. These are capacity and resolve, both of which must be sufficient for a nuclear threat to be credible to the adversary.

The first and necessary attribute of a credible nuclear threat is that the party making the threat has the capacity to deliver on the threat. There is no doubt that the United States can reduce the DPRK into a smoking, radiating ruin in a few hours if it decides to do so with only a small fraction of its missile force, either from submarines, or from land-based missiles. These missiles are well-tested, reliable and would be precision-targeted. There is no credibility gap here, whatsoever.

Even to develop a minimum deterrent that is deliverable on targets in the DPRK would take the ROK years to produce, test, and deploy. Until then, the ROK would be naked in terms of posing a countervailing nuclear threat to the DPRK. Even then, a ROK force would be vastly inferior and less credible to US nuclear forces from a purely military viewpoint. The ROK also lacks the space-based and high altitude reconnaissance and other intelligence gathering systems needed for precision targeting of nuclear weapons, especially to hit mobile targets or to rapidly redial target coordinates in order to attack DPRK command-and-control systems as they present themselves.

The second aspect of credibility is the resolve of the party issuing a nuclear threat to make good on it. In this regard, the words “Hiroshima” and “Nagasaki” provide a short answer as to American credibility from a North Korean perspective.

Even when it comes to intrinsic interest in retaliating against nuclear attacks on South Korea, it is not evident that the balance weighs in favor of making a South Korean nuclear force being more credible than relying on American nuclear forces, once North Korean forces can hit the US homeland. Any attack or threat of nuclear attack by the DPRK on the ROK signals that an attack on the United States may be forthcoming and requires immediate response—although that response may not be nuclear for various reasons. For all intents and purposes, the two are indistinguishable and the DPRK knows that already.

Second, the United States not only has its direct vital interests vested in South Korea, including American and allied lives and treasure spent during and since the Korean War; and its economic interests in a vital South Korean economy. What happens in the ROK also affects directly its strategic relationship with China, which involves US and Chinese nuclear weapons not only in relation to the Taiwan Straits issue, but also with regard to the Peninsula. North Korean nuclear threats aimed at the ROK reverberate instantly into the US-China relationship, as occurred in 2012 and 2013.

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## **VII. What Should South Korea Do Instead?**

The main driver of South Korean longing for nuclear weapons is to offset North Korea's coercive and opportunist use of nuclear threat. This is not a deterrent use of nuclear weapons by the North, but a compellent one—that is, one that attempts to change US or ROK policies toward the DPRK by nuclear threat. Matching a DPRK compellent nuclear force is not compatible with alliance with the United States.

South Koreans must decide whether the reassurance that they obtain from their own nuclear weapons is worth rupturing this alliance—which it would most certainly do. Likewise, would the destabilizing and counter-productive political and military effects that would follow from hypothetical re-deployment of US nuclear weapons in Korea be worth putative deterrence gains?

South Korea's best military option is to respond against the DPRK's nuclear threat by developing its conventional military forces in alliance with the United States, and in cooperative military-military relations with all states in the region. South Korea should avoid a simplistic retaliatory response to North Korean provocations, and work closely through Combined Forces Command to develop operational strategies underscoring the absolute and relative superiority of ROK-US allied forces while avoiding deployments and exercises that suggest pre-emptive attacks aimed at the leadership, or positioning of forces that imply a pending all-out attack on the DPRK (especially offshore US forces). Specifically recommended in this regard is avoidance of CFC operations designed to degrade KPA command-and-control, destroy its leadership, and strike strategic forces, including nuclear weapons, that may induce nuclear strikes from the DPRK because they may believe themselves to be trapped in a "use or lose" situation. Strengthening US-ROK defenses, including counter-missile and hardening of US-ROK command posts against nuclear attack, reduce further the chance of a DPRK attempt to use nuclear weapons to decapitate the ROK and US military.

This non-nuclear national military narrative should be matched with diplomacy that redefines the goals of reviving the moribund Six Party Talks to achieving a comprehensive security settlement, not just the nuclear disarmament of North Korea. At the same time, South Korea must maintain an open door policy towards the North. The South is powerful enough today to be strategically patient with the North for as long as it takes for the North to commence a genuine reconciliation process leading to rapprochement, and eventually peaceful reunification. In this ultimate end game, nuclear weapons have no role to play.

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