

# WAR ON THE ROCKS



## Revisiting the Value of the U.S. Nuclear Umbrella in East Asia

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Despite stringent international sanctions, North Korea's nuclear weapons and ballistic missile programs have developed at breakneck speed and show no sign of slowing down. The Trump administration's "maximum pressure" approach to the problem has little to show besides growing fear of a U.S. preemptive strike and a war of words between two colorful leaders. Yet North Korea's ability to hold the United States homeland at risk with a nuclear weapon raises important questions about the future of extended deterrence commitments and especially the U.S. nuclear umbrella over South Korea and Japan.

China's growing military power also presents a serious, albeit less urgent, challenge to extended deterrence. Improvements in weapons technology, extensive organizational reforms, and assertive moves in disputed areas like the South China Sea stoke regional fears that China's rise may not be peaceful. As Beijing narrows the local balance of power gap with the United States, security commitments made by Washington decades ago could become harder to maintain. A relatively calm U.S.-China relationship suggests a very low probability of a serious crisis for the foreseeable future, but U.S. policymakers must keep this long-term challenge in the back of their mind as they contend with the immediate crisis on the Korean Peninsula.

Both the North Korea and China challenges make Terence Roehrig's book, *Japan, South Korea, and the United States Nuclear Umbrella*, a valuable tool for American analysts grappling with questions of extended deterrence in an increasingly volatile Northeast Asia. The book opens with an excellent summary of deterrence theory before laying out the history of the U.S. nuclear umbrella to Japan and South Korea. Roehrig uses this accessible blend of theory and history to explore the future of both extended deterrence and the nuclear umbrella.

Although Roehrig treads somewhat cautiously in his analysis, and has left some important strategy and policy debates under-discussed, his is an otherwise exceptional book that offers a great starting point for future research.

Roehrig makes two important arguments about the nuclear umbrella and the role it plays in extended deterrence. First, he argues that "The nuclear umbrella [over Japan and South Korea] likely does little to deter anything other than nuclear war, because threats to use nuclear weapons...are simply not very credible." During the Cold War, nuclear weapons were the best way for the United States and its allies to offset the large militaries of North Korea and China. Today, however, modern conventional weapons provide the United States and its allies with other means for countering quantitatively superior adversaries without the same need for nuclear

weapons. As Roehrig writes, “The United States has numerous, potent conventional options that would have similar strategic effects [as nuclear weapons] on an adversary and would be highly credible.” Roehrig does acknowledge that the destructive power of nuclear weapons coupled with ambiguity over the conditions that would lead to their use may be valuable for deterrence, but the book’s core take-away is that the nuclear umbrella is real but is not, in the end, credible for its primary purported aim of deterrence.

Second, Roehrig argues that the nuclear umbrella is vital for alliance reassurance and for maintaining a generally strong relationship with Japan and South Korea. He writes, “Despite the significant credibility problems of nuclear weapons in extended deterrence...the nuclear umbrella is an important political signal that reflects and helps buttress the overall health of the alliances.” According to Roehrig, closing the U.S. nuclear umbrella would likely have greater costs than benefits. Tokyo and Seoul are highly sensitive to U.S. actions that weaken the nuclear umbrella. For example, Roehrig argues that Japanese analysts and officials were very concerned by the Obama administration’s decision to retire the Tomahawk Land-Attack Nuclear Cruise Missile (TLAM/N) in the early 2010s. He also notes that South Korea embarked on a covert nuclear weapons program in the 1970s after regional events — the U.S. defeat in Vietnam and rapprochement with China — called into question the reliability of the nuclear umbrella. Closing the nuclear umbrella at a time of intense uncertainty would likely exacerbate regional tension despite the fact that the U.S. pledge to use nuclear weapons is so difficult to make credible. As Roehrig states, “To remove the umbrella based on the lack of credibility may be a serious negative political signal and a modification of the status quo that would be very disturbing to allies.”

Thus the United States finds itself in a strategic catch-22. It is practically impossible for Washington to make the nuclear umbrella credible as a deterrent due to the military and reputational problems attendant with nuclear use, so allies can never be completely reassured. However, if Roehrig’s assessment is correct, the costs of abandoning this dubious position would likely outweigh the benefits. While Roehrig does a commendable job explaining the current state of extended deterrence and the nuclear umbrella, his analysis does not dive deeply enough into what the future may hold. On the whole, *Japan, South Korea, and the United States Nuclear Umbrella* is a valuable resource for understanding how these three countries arrived at the current moment. Yet Roehrig misses an opportunity to discuss in detail some important issues related to extended deterrence that could have major policy implications in the years to come.

For starters, the U.S. nuclear umbrella is not the only component of America’s extended deterrence commitments to Japan and South Korea. Yet Roehrig only briefly touches upon this fact in the book. A strong Japan and South Korea armed with conventional precision strike and ballistic missile defense (BMD) capabilities could reduce the relative importance of the nuclear umbrella in extended deterrence. While the U.S. nuclear umbrella may still be valuable for deterring the use of a nuclear weapon, it is substitutable. Eventually, stronger U.S. allies could enable Washington to adopt a more restrained force structure and strategy in East Asia.

Japan and South Korea are making significant investments in conventional strike and BMD that bolster their contribution to extended deterrence, with each country emphasizing different capabilities based on their particular threat perceptions. Tokyo’s close cooperation with Washington on BMD was prompted by North Korean satellite launches and ballistic missile tests that flew over Japanese territory. This emphasis on BMD fits into Japan’s defensively-oriented

military posture and the importance Tokyo places on close cooperation with the United States as part of its overall defense strategy. The Japanese military is also improving its conventional strike capabilities, though these developments are in a much earlier stage compared to BMD cooperation with the United States. Moreover, while North Korea provides the immediate impetus for Japan's pursuit of conventional strike capabilities, the long-term threat they are intended to counter is China. Tokyo does not want a defense posture independent of the United States and places great emphasis on the U.S. nuclear umbrella, but even historically pacifist Japan realizes it must play a greater role in providing for its own defense as regional threats grow more serious.

By contrast, South Korea's approach to conventional strike and BMD is driven entirely by North Korea. Recent developments in its defense posture stress independence from, rather than integration with, the United States. After North Korean military forces sank a South Korean warship and shelled an offshore island in 2010 "[South Korean] leaders...concluded that to deter North Korea from further provocations, it needed to have its own capability to strike targets throughout [North Korea]." South Korea now possesses an impressive array of conventional ballistic and cruise missiles and has developed two operational concepts that call for early strikes against North Korean leadership targets, missile sites, and the city of Pyongyang in the event of a conflict. South Korea can, in theory, use these conventional strike forces unilaterally. Roehrig notes this, stating that "...South Korea is not reliant solely on U.S. conventional strike or the nuclear umbrella to preempt or retaliate." However, South Korea's conventional strike capability depends on U.S. intelligence, surveillance, and reconnaissance (ISR) capabilities for targeting. Until Seoul develops more sophisticated ISR, its strike capability will not be fully independent from the United States.

South Korea's search for military options independent from the United States extends to BMD. Seoul is anxious to develop indigenous BMD systems, and has repeatedly rejected invitations to integrate its capabilities with American and Japanese systems. This does not mean that South Korea will go it alone completely on BMD; Seoul has participated in training simulations with the United States and Japan and hosts a Terminal High-Altitude Area Defense (THAAD) battery near the city of Seongju. But South Korea's longstanding antipathy toward Japan makes it wary of becoming enmeshed in a regional BMD architecture that links its fate to its former colonial overseer.

### **Three Overlooked Scenarios**

While Roehrig's book is a good foundational text on modern extended deterrence in Asia, it fell short in addressing the three most likely conflict scenarios that could invoke U.S. extended deterrence commitments: China establishing military control over disputed islands in the East China Sea; a North Korean invasion of South Korea; and the first use of a nuclear weapon by North Korea. In each scenario, the political and psychological rationales that Roehrig establishes for maintaining the nuclear umbrella persist, but he does not address the declining relative importance of U.S. nuclear weapons as South Korea and Japan develop their ability to implement deterrence by denial using conventional capabilities and BMD. Only in the third scenario does the U.S. nuclear umbrella offer unique deterrence value, and even there it generates risks of its own.

*East China Sea*

One of Japan's most pressing short-term security challenges is maintaining its control over islands in the East China Sea that China also claims. While the possibility of China initiating a large-scale conflict against Japan over the uninhabited Senkaku/Diaoyutai islands is unlikely, lower-level friction is entirely plausible. As Roehrig states, "Conflict in gray zones... is of greater concern, along with the possibility that a small-scale or accidental clash could escalate." Beyond traditional war, Japanese strategists have been preoccupied deterring lower-level aggression in general, and they specifically seek to deter a fait accompli in which China seizes disputed territory and threatens escalation should Japan try to restore the status quo ante.

The U.S. nuclear umbrella is ill-suited for deterring such gray-zone scenarios in the East China Sea. It strains credulity to think U.S. leaders could convince Beijing that it will use nuclear weapons to prevent or reverse the seizure of uninhabited rocks in the East China Sea. According to Daryl Press's book on credibility, "Leaders assess the credibility of threats by comparing the expected costs of carrying out those threats against the interests at stake." Press's views on credibility have been overturned in recent years by new research, but none of the new literature disputes his emphasis on the balance of interests for making credible threats. The U.S. nuclear umbrella plays no plausible role in a gray-zone scenario involving Chinese aggression in the East China Sea because the U.S. stake in uninhabited rocks is too negligible to risk Chinese nuclear retaliation. As Fiona Cunningham and M. Taylor Fravel's work on China's nuclear strategy argues, "[Chinese analysts] implicitly assume that the stakes would be too low for the United States... and that Washington would either restrain or abandon its allies if defending them gave rise to a situation in which the United States would need to threaten to use nuclear weapons."

While the U.S. nuclear umbrella offers little protection in an East China Sea scenario, improved conventional strike capabilities would allow Japan to implement a deterrence-by-denial approach much more credibly. As Roehrig explains in his chapter on deterrence theory, "Deterrence by denial seeks to defeat an attack or... to make an aggression so costly that it would not be worth attacking in the first place." Intelligence gathering assets, anti-aircraft and anti-ship missiles stationed on nearby Japanese islands, and maritime patrol ships and aircraft would make it very difficult for China to covertly seize territory and would provide highly credible non-nuclear options for defending Japanese territorial claims. Beijing does possess a quantitative advantage in ships and aircraft, but Tokyo does not need parity with China to effectively impose high military costs that could deter Chinese overreach.

### *A North Korean Invasion*

The U.S. nuclear umbrella is also unnecessary to deter a North Korean invasion of South Korea due to Seoul's increasingly powerful conventional forces. South Korea's geography creates predictable invasion routes that are heavily fortified by American and Korean troops who have had years to train for stopping such an invasion. Moreover, South Korea's offensive conventional strike capability allows it to hold North Korean leadership targets at risk with weapons that would almost certainly be used in the event of an invasion. Roehrig states, "It is not clear that [North Korea] is any more deterred by the threat of nuclear weapons than it is by the likelihood of an overwhelming conventional response that would have the same strategic effect."

Roehrig points out that the U.S. nuclear umbrella "adds another layer of punishment" for North Korea should it invade, but Washington would probably hesitate to make good on its nuclear threats. Putting aside the reputational and normative costs of violating the nuclear taboo, there

are strong operational downsides to using nuclear weapons in an invasion scenario that Roehrig does not emphasize enough. A U.S. nuclear attack meant to blunt an invasion would necessarily entail strikes against North Korean troops near the Demilitarized Zone (DMZ) because this is where the majority of troops are permanently deployed. Fallout from these strikes would be a major hazard to both civilians close to the DMZ (Seoul is only 35 miles away) and defending allied troops. The contamination caused by nuclear strikes against North Korean targets in the country's interior would kill civilians, complicate a conventional counter-attack into the North, and make post-conflict stabilization more dangerous. While it is impossible to prove a negative in this case — that is, that the U.S. nuclear umbrella does not deter a North Korean invasion — the conventional superiority of U.S. and South Korean forces represents a more credible and effective deterrent than that umbrella.

### *North Korean Nuclear First-Use*

Of the three scenarios examined here, the U.S. nuclear umbrella is probably most valuable for deterring North Korea from resorting to nuclear first-use, but even under this scenario the umbrella is hardly an unmitigated good. The logic of the nuclear umbrella for deterring a nuclear strike by North Korea rests on punishment. If Kim Jong Un uses a nuclear weapon first, he would be inviting U.S. nuclear retaliation in kind, as well as, in all likelihood, the end of his regime. Yet consider for a moment the technical characteristics of North Korea's nuclear forces and its unfavorable military balance vis-à-vis the United States. In this context of nuclear and conventional inferiority, its nuclear weapons should be most valuable for heading off a U.S. preemptive strike against its nuclear forces and political leadership. The U.S. nuclear umbrella may be a credible deterrent, but it may also indirectly fuel a North Korean escalatory first-strike strategy if conflict breaks out. In other words, it is just as likely that North Korean nuclear first-use prevents U.S. nuclear retaliation by raising the stakes of an ongoing conflict. The United States may be able to soothe Pyongyang's itchy trigger finger by adopting a "no first-use" pledge, but, as Roehrig shows, ambiguity over nuclear first-use is a defining feature of the U.S. nuclear umbrella. It is also unclear whether North Korea would believe such a U.S. pledge.

### **Preventing a Nuclear Liability**

The U.S. nuclear umbrella should not be an albatross around the neck of America's security policy in East Asia. As Tokyo and Seoul improve their conventional military capabilities, the relative importance of the U.S. nuclear umbrella for deterring many types of regional conflicts should decrease. Stronger Japanese and South Korean conventional forces could more credibly deter a variety of likely conflict scenarios than nuclear weapons, and the United States should encourage allies to take up more of the burden for regional security. If the United States is able to place greater responsibility for deterring conflicts on the conventional prowess of its allies, it could then afford to scale back its own force posture in East Asia and pursue a more restrained regional strategy. Roehrig offers persuasive insights into why scrapping the nuclear umbrella is inadvisable, but neither should U.S. strategy hinge on a tool that cannot credibly address the region's most important challenges.

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