

Enforcing a nuclear taboo without risking a nuclear war

Mariana Budjeryn

Senior Research Associate, Harvard Kennedy School Belfer Center

On February 24, 2022, Russia launched an invasion of Ukraine. However, as the invasion did not go as expected, Russian President Vladimir Putin made the world tremble with anxiety by mentioning the possibility of using nuclear weapons. If Russia used nuclear weapons, it would mean breaking the long-held nuclear taboo, which would also open up the possibility for other countries to use nuclear weapons in the future. As such, we live in an era in which crisis management surrounding nuclear weapons has become more critical than ever. The Korean Peninsula is also not free from nuclear weapons. In this JPI PeaceNet, we will examine the situation surrounding nuclear weapons in Russia and Ukraine and the implications of that situation for the Korean Peninsula through a contribution by Senior Research Associate Mariana Budjeryn of the Belfer Center at Harvard Kennedy School. [Edited by Alec Chung, Research Fellow (scchung@jpi.or.kr)]

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Conventional Sword with a Nuclear Shield

Even though the war in Ukraine has been fought with conventional weapons only, it is very much a nuclear crisis. Russia launched its invasion and has been prosecuting the war under the cover of nuclear threats. On February 24, 2022, hours before tens of thousands of Russian troops marched across Ukraine's borders with the goal of capturing its capital Kyiv, President Putin reminded the world that Russia is a major nuclear power and that those who dared to interfere with Russian designs on Ukraine would face "consequences never seen... in history," a well understood euphemism for a nuclear threat.¹⁾

In the following months, dozens more nuclear signals followed, including putting Russia's strategic nuclear forces on a higher level of readiness,²⁾ multiple pronouncement by Russian officials,³⁾ the testing of Russia's new heavy intercontinental ballistic missile Sarmat,⁴⁾ and the use on targets in Ukraine – with a conventional payload – of dual-capable systems such as short-range ballistic missile Iskander-M and the first known use of the new hypersonic cruise missile Kinzhal, one of the novel strategic systems announced by Putin in March 2018.⁵⁾

1) "Address of the President of the Russian Federation," February 24, 2022, <http://kremlin.ru/events/president/news/67843>.

2) Office of the President of Russia, "Meeting with Sergei Shoigu and Valery Gerasimov," February 27, 2022, <http://en.kremlin.ru/events/president/transcripts/67876>.

3) Liviu Horovitz and Lydia Wachs, "Russia's Nuclear Threats in the War against Ukraine. Consequences for the International Order, NATO and Germany," SWP Comment 29 (April 2022): 7.

4) Office of the President of Russia, "Test Launch of Sarmat ICBM," April 20, 2022, <http://en.kremlin.ru/events/president/news/68252>.

For the most part, these threats and signals have been directed at Ukraine's western partners, the US and NATO allies, to dissuade them from direct engagement in the war on Ukraine's side. It would not be entirely correct to say that these threats have 'worked.' Yet nuclear deterrence between Russia and the US/NATO seems to hold to induce restraint on both sides. The US and NATO allies have not gotten directly engaged in the war on Ukraine's behalf, despite their extensive political and military support for Ukraine. Indeed, US President Joe Biden and NATO Secretary General Jens Stoltenberg announced that the US and NATO will not put 'boots on the ground' even before the invasion and the accompanying Russian threats.⁶⁾ While part of the reason for US restraint might be its caution against getting involved in foreign conflicts, given the recent history of its wars in Afghanistan and Iraq, the fear of nuclear escalation is not to be dismissed. For its part, Russia has not expanded its war onto NATO allies, despite its rhetoric that Ukraine is a 'proxy' of NATO and its threat to target Western arms shipments to Ukraine.⁷⁾

In sum, nuclear deterrence is contributing to restraint and the war remains limited to the original theater, Ukraine, and the original two belligerents, Russia and Ukraine. Nuclear deterrence, however, is a relationship between two nuclear-armed adversaries and – through extended deterrence – their allies. Yet what the war in Ukraine reveals is that not all nuclear crises happen between nuclear-armed adversaries and not all risk of nuclear use is due to a failure of nuclear deterrence. With so much focus on nuclear deterrence, direct, extended, and otherwise, much less attention has been paid to nuclear use, by a nuclear state against a non-nuclear state.

Risk of Russian Nuclear Use and Ukraine's Nuclear Disarmament

Russia's nuclear rhetoric and signaling, coupled with the floundering of its conventional campaign in Ukraine, raised fears of an increasing risk of nuclear use by Russia against Ukraine to end the war on Russia's terms.⁸⁾ Indeed, not only did Russia failed to achieve a

5) "Russia Says It Has Deployed Kinzhal Hypersonic Missile Three Times in Ukraine," Reuters, August 21, 2022, <https://www.reuters.com/world/europe/russia-says-it-has-deployed-kinzhal-hypersonic-missile-three-times-ukraine-2022-08-21/>.

6) The White House, "Remarks by President Biden on Russia's Unprovoked and Unjustified Attack on Ukraine," February 24, 2022,

<https://www.whitehouse.gov/briefing-room/speeches-remarks/2022/02/24/remarks-by-president-biden-on-russias-unprovoked-and-unjustified-attack-on-ukraine/>; NATO, "Press Conference by NATO Secretary General Jens Stoltenberg Following the Extraordinary Meeting of NATO Ministers of Defence," March 16, 2022,

https://www.nato.int/cps/en/natohq/opinions_193194.htm.

7) James Marson, "Russia's Lavrov Says NATO Is Using Ukraine as a Proxy, Warns Against Global Conflict," Wall Street Journal, April 26, 2022,

<https://www.wsj.com/articles/russias-lavrov-says-nato-is-in-proxy-war-in-ukraine-11650965583>.

8) Francesca Giovannini, "A Hurting Stalemate? The Risks of Nuclear Weapon Use in the Ukraine Crisis," Bulletin of the Atomic Scientists, March 2, 2022, <https://thebulletin.org/2022/03/a-hurting-stalemate-the-risks-of-nuclear-weapon-use-in-the-ukraine-crisis>

blitz takeover of Ukraine, as was its original plan, it suffered major setbacks. In September 2022, Ukrainian armed forces, aided by Western arms supplies, launched a successful counteroffensive that liberated large swaths of Russian-occupied territory in the north-eastern Kharkiv region and made gains in the southern region of Kherson. In response, the Kremlin escalated by announcing partial mobilization to raise additional troops, holding ‘referenda’ in the occupied territories and illegally annexing them.

Concomitantly, Russian nuclear threats expanded as well. On September 21, while announcing the partial mobilization and referenda, President Putin said that Russia is prepared to use “all means at our disposal,” another euphemism for a nuclear threat, to secure Russia’s territorial integrity, which now presumably includes the newly annexed regions of Ukraine.⁹⁾ At the end of October, Russia brought accusations to the UN Security Council that Ukraine is developing a ‘dirty bomb’ in order to insinuate a Russian low-yield nuclear strike.¹⁰⁾ While these accusations provided no evidence – and at any rate were highly unfeasible, since it would be impossible to mistake a ‘dirty bomb’ explosion for a real nuclear weapon – it remains highly circumspect why Russia would concoct such a story if not to justify its own use of a nuclear weapon.¹¹⁾

Could Russia use some number of tactical nuclear weapons in Ukraine to end the war, which is now more prolonged and far less successful than Russia had hoped, and force Ukraine to agree to its terms? The risk of such use is non-negligible and increases with Russia’s conventional losses, in early November exacerbated further by the loss of the southern city of Kherson. Whatever might dissuade Russia from using a nuclear weapon in Ukraine, it will not be nuclear deterrence, in its traditional sense as a threat of nuclear retaliation against Russia’s first use: Ukraine is not protected by either its own nuclear deterrent or that of an ally.

Indeed, in the early 1990s, Ukraine made a historic decision to surrender the nuclear weapons it inherited from the collapsed Soviet Union, as one of its legal successors. What

s/; Lawrence Freedman, “Going Nuclear. On Thinking the Unthinkable,” Comment Is Freed, September 20, 2022, <https://samf.substack.com/p/going-nuclear>; Brendan Cole, “Putin May Hit Back with Nuclear Weapons amid Ukraine Counter: Ex-NATO Chief,” Newsweek, September 13, 2022, accessed September 21, 2022, <https://www.newsweek.com/russia-ukraine-nato-nuclear-gottemoeller-1742533>; Masha Gessen, “Why Vladimir Putin Would Use Nuclear Weapons in Ukraine,” The New Yorker, November 1, 2022, <https://www.newyorker.com/news/our-columnists/why-vladimir-putin-would-use-nuclear-weapons-in-ukraine>.

9) “Address of the President of the Russian Federation,” September 21, 2022, <http://kremlin.ru/events/president/news/69390>.

10) Michelle Nichols, “Russia Raises Accusation at U.N. of Ukraine ‘dirty Bomb’ Plans,” Reuters, October 25, 2022, <https://www.reuters.com/world/europe/russia-raises-accusation-un-ukraine-dirty-bomb-plans-2022-10-25/>.

11) Dan Drollette and François Diaz-Maurin, “Russia Says Ukraine Is Preparing a ‘Dirty Bomb.’ Is It True, and What Does It Mean?,” Bulletin of the Atomic Scientists, October 27, 2022, <https://thebulletin.org/2022/10/russia-says-ukraine-is-preparing-a-dirty-bomb-is-it-true-and-what-does-it-mean/>.

Ukraine had surrendered did not amount to a fully-fledged nuclear deterrent but rather a nuclear option. Yet with some thousands of nuclear weapons on its territory, parts of the Soviet military industrial complex, and well-established nuclear science, Ukraine could have turned that option into a deterrent had it decided to commit resources and defy the international nonproliferation regime.

For a number of reasons, including the desire to join the international community on good terms, Ukraine rejected the nuclear option and joined the Treaty on the Non-proliferation of Nuclear Weapons (NPT) in exchange for security assurances of nuclear states, depositaries of the NPT: the US, the United Kingdom, and Russia.¹²⁾ These assurances, formalized in the so-called Budapest Memorandum of 1994, included pledges to respect Ukraine's territorial integrity, inviolability of its borders and abstain from use or threat of force.¹³⁾ Meanwhile, Ukraine's NATO aspirations that would have brought with it the US/NATO security guarantee, conventional and nuclear, came to naught, due to fears, especially in France and Germany, of aggravating Russia, as well as due to Ukraine's own internal divisions on the issue prior to 2014.

In the end, Ukraine was left in a security vacuum, lacking a nuclear and conventional deterrent that, combined with Russia's underestimation of Ukraine's capacity and will to resist, invited Russian aggression. That Russia was one of the signatories of the Budapest Memorandum, a document that accompanied Ukraine's nuclear renunciation and accession to the NPT, is highly damaging to the standing and credibility of the international nonproliferation regime. Countries facing a similar security predicament – a threatening, more powerful neighbor and an absence of extended nuclear and conventional deterrence – might arrive at a conclusion that only nuclear weapons of their own could provide for their security.

Enforcing Nuclear Non-use

Beyond the proliferation risks, there is an imperative to ensure the continued non-use of nuclear weapons. Whether it is due to nuclear taboo or a concern for precedent-setting,

12) Mariana Budjeryn, "Non-Proliferation and State Succession: The Demise of the USSR and the Nuclear Aftermath in Belarus, Kazakhstan, and Ukraine," *Journal of Cold War Studies* 24, no. 2 (2021): 46–94; Mariana Budjeryn and Polina Sinovets, *Interpreting the Bomb: Ownership and Deterrence in Ukraine's Nuclear Discourse*, NPIHP Working paper #12 (Woodrow Wilson International Center for Scholars, December 13, 2017),

<https://www.wilsoncenter.org/publication/interpreting-the-bomb-ownership-and-deterrence-ukraines-nuclear-discourse>; Mariana Budjeryn, "The Breach: Ukraine's Territorial Integrity and the Budapest Memorandum," Woodrow Wilson Center NPIHP, September 20 14, <http://www.wilsoncenter.org/sites/default/files/Issue%20Brief%20No%203--The%20Breach--Final4.pdf>.

13) "Memorandum on Security Assurances in Connection with Ukraine's Accession to the Treaty on the Nonproliferation of Nuclear Weapons," December 5, 1994, <https://treaties.un.org/doc/Publication/UNTS/Volume%203007/Part/volume-3007-I-52241.pdf>.

after 77 years of nuclear non-use, most in the international community agree that any nuclear use would be unacceptable and must be prevented. US officials have repeatedly stated in public, and reportedly in private, to impress on the Kremlin that crossing the nuclear threshold would fundamentally change the nature of the conflict and be catastrophic for Russia.¹⁴⁾ The US have maintained a considerable degree of ambiguity, however, preferring not to threaten any specific consequences that would follow a Russian nuclear use.

One reason might be that ambiguity in nuclear matters has its value: it keeps options open, allows to better calibrate responses to the offense committed, and avoids getting ensnarled by red lines. Another reason for the ambiguity is that it is genuinely difficult to formulate a response to a possible Russian nuclear use against Ukraine in such a way that does not make the US and NATO a side to the conflict. For one, Ukraine is not a treaty ally of the US and making more specific threats on Ukraine's behalf might not be credible, not to mention, it could encounter pushback in US domestic politics. But perhaps more importantly, even a conventional NATO response against Russian military targets in Ukraine, as some have suggested,¹⁵⁾ would mean that, for the first time since the dawn of the nuclear age, two major nuclear powers would be involved in a direct conventional war. Once that line is crossed, controlling escalation is extremely difficult and the risk of an all-out nuclear exchange between adversaries that possess thousands of nuclear weapons each rises exponentially.

And so Ukraine, its Western partners, and the international community more broadly are faced with a formidable challenge: how to enforce a nearly eight-decade-long nuclear non-use without increasing the risk of nuclear war. The war in Ukraine highlights the perils and paradoxes of living in a nuclear-armed world, where nuclear weapons could at once protect through deterrence, enable conventional aggression, and with surprising suddenness, resurrect the specter of nuclear use and even nuclear war at a time when such things seemed to have faded into the distant past.

Lessons for Foes and Friends

The war in Ukraine, Russia's nuclear signaling in the course of it, and the responses of the

14) David E. Sanger, "Biden Says Russian Use of a Nuclear Weapon Would Be a 'Serious Mistake,'" The New York Times, October 25, 2022, sec. U.S., <https://www.nytimes.com/2022/10/25/us/politics/biden-russia-ukraine-nuclear.html>; Daniel Flatley, "Blinken Warns of Consequences If Nuclear Weapon Used in Ukraine," Bloomberg, October 26, 2022, <https://www.bloomberg.com/news/articles/2022-10-26/blinken-warns-of-consequences-if-nuclear-weapon-used-in-ukraine>.

15) Edward Helmore, "Petraeus: US Would Destroy Russia's Troops If Putin Uses Nuclear Weapons in Ukraine," The Guardian, October 2, 2022, <https://www.theguardian.com/world/2022/oct/02/us-russia-putin-ukraine-war-david-petraeus>.

US and the Western alliance are being watched closely by other nuclear-armed states and US allies and partners in the Asia-Pacific region. China, with its unabated intentions to someday incorporate Taiwan, is paying careful attention to Russian conventional campaign, the performance of Western weapons in Ukraine, the risk tolerance of Ukraine's Western partners, and the unity of the US-led alliance.

There is no reason to suppose that China, or other nuclear-armed states, would be as reckless and imprudent as Russia in unleashing a war that they cannot win, not least because, hopefully, Russian struggles in Ukraine may serve as a lesson in what not to do. Having said that, the Russian invasion of Ukraine and the reluctance of the majority of world political leaders and publics to believe that it was actually going to happen (even after explicit warnings of the US intelligence community) cautions against projecting one's own patterns of rationality and understandings of costs and benefits to one's adversary. This is particularly pertinent to South Korea, which faces a North Korean adversary led by an illiberal personalistic regime of Kim Jong Un, whose motivations and intentions might be just as opaque and difficult to define and anticipate as those of Russian President Putin. Good intelligence, troop movements, and operational preparations proved a more accurate predictor of events to come than any pronouncements of a dictator or punditry by analysts about why it would not make sense for Russia to invade.

With nuclear deterrence proving its worth for NATO allies and Russia, the demand for it will likely increase, not abate. Any hopes of denuclearizing North Korea should be abandoned in favor of developing robust policies to contain and manage this new nuclear state long term. Concomitantly, US allies that feel particularly vulnerable, such as NATO's Eastern flank, Taiwan, and South Korea, will look to reinforce US security commitment and extended deterrence to their nations. In this regard, however, the example of Ukraine is encouraging. If the US is willing to extend such wide-ranging and generous defense support to a non-treaty ally like Ukraine and make efforts to prevent a nuclear use there, it surely stands to deliver on its long-standing treaty alliance commitments. Yet while leaning on US security guarantee, South Korea should first and foremost rely on and strengthen its own defense capabilities, both as a conventional deterrent that should help dissuade any adversary from unleashing a war and as the first bulwark of defense should a war be unleashed.

Author bio

Mariana Budjeryn is a Senior Research Associate with the Project on Managing the Atom (MTA) at the Harvard Kennedy School's Belfer Center. Formerly, she held appointments as a Stanton Nuclear Security Fellow at MTA, a fellow at Harvard Davis Center for Russian and Eurasian Studies, and as a visiting professor at Tufts University and Peace Research Institute Frankfurt. Mariana's research focuses on the international nonproliferation regime, arms control, and post-Soviet nuclear history. Mariana also leads MTA's Atomic Voices seminar series that provides a forum for marginalized voices and perspectives in the nuclear field. She is one of the architects and organizers of ACONA, an immersive course in arms control history, technology, and negotiations skills. Mariana's research and analytical contributions appeared in the Journal of Cold War Studies, Nonproliferation Review, Foreign Affairs, Washington Post, Boston Globe, Bulletin of the Atomic Scientists, War on the Rocks, Arms Control Today, and in the publications of the Woodrow Wilson Center where she is a Global Fellow. Mariana's book *Inheriting the Bomb: The Collapse of the USSR and the Nuclear Disarmament of Ukraine* is forthcoming in December 2022 with Johns Hopkins University Press.



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