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US Security Assurances and Nuclear Tripolarity

Linde Desmaele

The persistent threat of nuclear proliferation, setbacks in arms control and disarmament, the disruptive potential of technological advancements in the nuclear domain, and a resurgence of overt nuclear brinkmanship suggest the advent of a new nuclear age.¹ One of its key features is the risk of sharp nuclear competition among Washington, Moscow and Beijing.² While analysts and scholars have begun exploring the implications for US nuclear deterrence, they have devoted less attention to American nuclear-security assurances.³ The challenges are not new and have been much debated.⁴ Tripolarity, whereby three major nuclear-armed powers compete for advantage, imposes a new layer of complexity and compels revisiting them.⁵

A new landscape

In previous decades, although there were multiple nuclear-armed states, their nuclear arsenals were significantly smaller and less sophisticated than those of the United States and Russia. Other states with nuclear weapons also lacked the economic and military characteristics of a superpower. During the Cold War, they were generally either aligned with or strongly leaned toward one of the two superpowers. As a consequence, much of US nuclear

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strategy, including its approach to nuclear assurances, was premised on bipolar competition between the United States and the Soviet Union.

Today, however, the US is engaged in several separate but interconnected nuclear rivalries. Although multiple rivalries are simultaneously under way, the 2022 US Nuclear Posture Review primarily centres on those involving China and Russia.⁶ These countries, like the United States itself, are engaged in extensive, long-term modernisation programmes driven in part by their perceptions of the capabilities of the other two countries. The United States maintains the most advanced and survivable arsenal among the three. Russia also has a substantial arsenal and has made significant investments in so-called non-strategic nuclear weapons. China has accelerated the modernisation of its nuclear arsenal, though its current one is much smaller and less sophisticated than the United States' or Russia's. While the US has tenser relationships with Russia and China than they have with each other, they still closely monitor each other's nuclear activities.⁷

Assurances are commitments made through declarations or less explicit signals to undertake or refrain from taking specific actions in the future. While deterrence relies on the threat of force, assurance is based on the assessment that, in certain circumstances, greater stability results from providing others with a greater sense of security.⁸ Currently, policy discussions in Washington revolve predominantly around the credibility of allied assurance.⁹ The 2022 US Nuclear Posture Review underlines the centrality of allied assurance to the US nuclear posture and explicitly commits to strengthening it.¹⁰ Yet assurances also play an important role in the relationship between the United States and its nuclear-armed adversaries. If an actor expects punishment regardless of whether it challenges a deterrent commitment, it lacks the incentive to avoid doing so.¹¹ Deterrence can fail if assurance is insufficiently credible. A further complicating matter is the United States' pledge not to 'use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the NPT [Nuclear Non-Proliferation Treaty] and in compliance with their nuclear non-proliferation obligations'.¹² These are negative assurances, committing the United States to refrain from taking actions against a target state.

Tripolar competition raises three sets of challenges with respect to US nuclear-security assurances. Firstly, the United States needs to synchronise

its efforts to assure allies, responding effectively to the diverse concerns and requirements of multiple allies across different geographic theatres.¹³ Secondly, there is the problem of ambiguity. A higher number of nuclear-armed competitors makes it harder for the United States to strike a balance between deterrence and assurance in individual bilateral relationships, and increases the risk of accidental crises or wars due to miscalculations and misperceptions.¹⁴ Thirdly, the proliferation problem becomes more acute as more nuclear-weapons states appear to normalise nuclear weapons as appropriate means of pursuing national-security goals. Here there is persistent tension. While providing extended nuclear deterrence and assurance to allies requires the United States to maintain a sufficiently large nuclear arsenal ready for potential deployment, doing so makes assurances to non-nuclear states that nuclear weapons will not be used against them less credible.¹⁵ Vertical proliferation among the established nuclear powers may therefore inadvertently foster horizontal proliferation.¹⁶

Allied assurance and the synchronisation challenge

The United States' commitment to using nuclear weapons to deter and defend against attacks on its allies – alternately referred to as its nuclear umbrella or extended nuclear deterrence – has played a pivotal role in US security policy for nearly eight decades.¹⁷ What Glenn Snyder calls the 'alliance dilemma' has made it a vexing commitment. Allied states fear both abandonment and entrapment. Abandonment can take various forms, such as failing to provide expected support in critical situations, reneging on commitments or aligning with adversaries. Entrapment involves being drawn into conflicts over an ally's interests that may not fully align with one's own. It occurs when the value of preserving the alliance outweighs the costs of fighting for the ally's particular cause.¹⁸ These considerations are particularly salient in the nuclear domain because of the unique destructive capability of nuclear weapons. The core challenge for Washington is to assure allies that its nuclear deterrent is reliable and offers protection, but that it will not recklessly provoke nuclear war.

The credibility of US assurances is in the eye of the beholder.¹⁹ As Heather Williams has put it, 'assurance for one is not assurance for all, and

what looks like assurance to one may look like entrapment to another'.²⁰ This underscores the need for the United States to tailor its strategies to multiple allies with diverse concerns and requirements, and to understand and shape their perceptions through dialogue and consultation.²¹

The United States must now synchronise its assurances to allies in both Europe and Asia.²² While the challenge of coping with the reverberations of US strategy in Asia for Europe and vice versa is nothing new, the shift away from a relatively Eurocentric extended-deterrence framework presents distinct challenges. Allies who tend to fear abandonment may fear it even more in the context of tripolarity. Allies recognise that US military resources and policymakers' attention are finite.²³ During the Cold War, US nuclear strategy prioritised a single primary nuclear-armed competitor, the Soviet Union, in both Europe and East Asia. Insofar as adjustments one side made to its policy in one region were likely to compel the other side to respond, there was no major risk of neglecting one region in favour of the other.²⁴ But with two nuclear major-power adversaries in separate regions, changes to the US commitment in one region will have a more immediate opportunity cost for its commitment to the other, since resources allocated in one area cannot be easily relocated to the other.²⁵

Tripolarity may also amplify allies' worries about entrapment, as they now face the additional risk of becoming embroiled in an extra-regional conflict. As Iain Henry notes,

if a state fears that its ally will abandon it if conflict breaks out with an adversary, it is unlikely to fear its ally entrapping it into a conflict with this adversary. However, it may be fearful of its ally entrapping it into a conflict with a different adversary.²⁶

While such entrapment could assume various forms, it is reasonable to expect any nuclear conflict, whether in Europe or Asia, to have spillover effects into other regions.

Allied concerns about abandonment and entrapment are shaped by the types of missions for which nuclear weapons could be used. Current US strategy for both Europe and Asia designates nuclear weapons to deter and

defend against a broad range of potential nuclear and non-nuclear threats, placing a significant burden on resources and refraining from establishing a sole-purpose commitment.²⁷ The United States is also committed to a doctrine that focuses on counterforce – that is, targeting an adversary's nuclear forces.²⁸ This approach is relatively resource intensive because it tethers the configuration of the US nuclear arsenal to that of its adversaries.²⁹ A counterforce approach requires nuclear forces of greater quantity and precision than a counter-value strategy centred on nuclear threats to an adversary's society and infrastructure.³⁰ Proponents of the current counterforce approach have called for a nuclear build-up to prepare for potential nuclear conflicts with both Russia and China.³¹ Counter-value advocates point out that it places lower demands on resources and may entail fewer immediate resource trade-offs.³²

The more missions the United States assigns to its nuclear weapons, the more difficult it will be for it to allay allies' fears of abandonment across multiple regions. Allies may also find the status quo itself escalatory, and fear entrapment instead. Different allies' demands for assurance may also change, complicating Washington's efforts to tailor its assurances.

Adversary assurance and the ambiguity challenge

There is a case to be made that more nuclear weapons for more players could actually make adversary assurance easier and have a stabilising effect. If the United States and multiple adversaries are mutually vulnerable, arguably they should all be deterred and incentivised to show restraint.³³ Under this rationale, the possibility of a response not only from an intended target but also from other nuclear-weapons states would strengthen strategic stability.³⁴ US policymakers have signalled concern about an 'opportunistic third party' that could exploit a potential nuclear conflict to enhance its own position.³⁵ Given that the cost of nuclear war may be even higher in a situation involving more nuclear players – or at least more uncertain – states have compelling reasons to avoid initiating one.³⁶

This logic may not hold in practice. Nuclear-armed states can inadvertently stumble into crises they wish to avoid owing to ambiguity about the status quo or miscalculation about how adversaries will perceive their

actions.³⁷ A single crisis could encompass multiple issues, with each participant defending a specific aspect of the status quo. Third parties can further complicate matters, making it unclear which side is acting defensively.³⁸ Since the perception of assurance varies from one party to another, having more players can open additional pathways to inadvertent war due to misperceptions or miscalculations. One example of this dynamic is the United States' deployment in South Korea of a regional missile-defence system. Its stated purpose was to defend South Korea against North Korean missiles. China, however, argued that it was part of a broader US scheme to develop a first-strike capability against China. US efforts to target one adversary may increase tensions in relations with others, fuelling arms races and ultimately weakening assurances provided to adversaries.³⁹

Long-standing questions about the compatibility between adversary assurance and allied assurance also endure. Some have argued that the two cannot be logically reconciled in situations of mutually assured destruction.⁴⁰ If, for example, country A invades an ally of country B, and B's defence of its ally increases the risk of nuclear escalation, it would appear irrational, thus not credible, for B to undertake that defence.⁴¹ However, if B enjoyed escalation dominance because of something akin to a credible first-strike capability, threats against B's ally could probably be more effectively deterred. Following this logic, scholars have argued that Cold War efforts to stabilise deterrence between the superpowers undermined the credibility of US extended nuclear deterrence. Conversely, US alliance commitments incentivised the US to develop war-winning strategies to assure allies and reinforced the possibility of a destabilising arms race.⁴²

Other have pointed out, however, that Thomas C. Schelling's famous 'threat that leaves something to chance' can help harmonise these seemingly conflicting objectives, and that the incompatibility problem is exaggerated.⁴³ His point is that a country need not always convey a definitive commitment that it will act in a given circumstance; threats that it merely could act can still be effective deterrents. The key insight here is that the final decision to carry out such threats may not be entirely within the control of the party making the threat due to accidents, flaws in decision-making processes, mechanical errors and so on.⁴⁴ From this perspective, the challenge for Washington is

not so much to establish escalation dominance but rather to keep the risk of all-out nuclear war at a level slightly above zero. Deterrence is thus conceived as a 'competition in risk-taking', not solely dependent on battlefield success. It is about showing the resolve to take risks that could lead to high costs that neither side desires, thus leveraging the mutual interest in avoiding nuclear war. From this standpoint, the requirements of assuring allies do not seem too different from those of assuring adversaries.

The fact of the matter is that the United States has in practice adopted a nuclear war-fighting strategy. Relatedly, some US allies in Europe and East Asia have opposed US proposals to reduce the role of nuclear weapons in their alliance posture, including US plans to adopt a 'sole purpose' policy.⁴⁵ If history offers any guide to the future, this suggests that Washington may well continue an approach in which efforts to bolster allied assurance tend to undermine adversary assurance and vice versa. But tripolar nuclear competition increases both the number of audiences involved and the associated risks.

Assuring third parties and the proliferation challenge

Since 1978, Washington has repeatedly indicated that it

will not use nuclear weapons against any non-nuclear-weapon state party to the NPT or any comparable internationally binding commitment not to acquire nuclear explosive devices, except in the case of an attack on the United States, its territories or armed forces, or its allies, by any state allied to a nuclear-weapon state or associated with a nuclear-weapon state in carrying out or sustaining the attack.⁴⁶

While these negative assurances are not part of the NPT text, they were reaffirmed in 1995 as an integral part of the treaty's indefinite extension.⁴⁷ Under United Nations Security Council Resolution 255, the United States has also pledged to come to the aid of a non-nuclear-weapons state threatened or attacked with nuclear weapons.⁴⁸ The difference between these assurances and the positive nuclear commitments made to US treaty allies essentially comes down to the fact that, in the latter case, the United States commits to using its own nuclear weapons to support its allies if necessary.⁴⁹

The United States' extended-deterrence commitments cut against the spirit of negative assurances to non-nuclear states.⁵⁰ Notes Jeffrey Knopf: 'Promises not to threaten or use nuclear weapons against non-nuclear states become more convincing if nuclear weapon states reduce the numbers of nuclear weapons they possess, and the missions and roles assigned to those.'⁵¹ Accordingly, non-nuclear-weapons states have grown dissatisfied with attempts to advance the NPT's ultimate goal of nuclear disarmament. This frustration was a major driver of the 2017 Treaty on the Prohibition of Nuclear Weapons.⁵² Tripolar nuclear competition may make matters worse by triggering horizontal proliferation through the normalisation or legitimisation of a reliance on nuclear weapons for national-security goals. Negative assurances, which limit the role of nuclear weapons, tend to align better with efforts to delegitimise these weapons.⁵³ Positive security assurances, such as extended nuclear deterrence, signal that nuclear weapons are valuable tools of statecraft. While such assurances are often credited with preventing nuclear proliferation within the US umbrella, this is not the case for those countries and actors that fall outside it. Moreover, some now argue that positive assurance can backfire by reinforcing the perception that allied security depends on nuclear weapons, boosting pro-nuclear factions in allied countries.⁵⁴

At bottom, the capacity of nuclear assurances to bolster non-proliferation is context-dependent. Convincing one actor to refrain from developing nuclear weapons might induce another to acquire them. Vertical and horizontal nuclear proliferation therefore cannot be treated as two fully separate challenges.

* * *

Washington has identified nuclear tripolarity as a central feature of the future strategic landscape. With respect to US nuclear-security assurances, this focus raises the challenges of synchronisation, ambiguity and proliferation. The United States must credibly assure allies in different theatres that its nuclear umbrella is reliable against more than one adversary. At the same time, it must avoid making nuclear weapons appear appropriate and

useful means for non-nuclear-weapons states, allies and adversaries alike to enhance their security. There is no easy solution to these challenges, as each choice involves trade-offs and political considerations. Both deterrence and assurance fundamentally involve influencing perceptions and intentions, and this is very hard to do. Since its inception, nuclear strategy has been as much an art as a science. That much has not changed.

Notes

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- ² See US Department of Defense, '2022 Nuclear Posture Review', p. 4, available at <https://armscontrolcenter.org/2022-nuclear-posture-review/>.
- ³ See Center for Global Security Research, 'China's Emergence as a Second Nuclear Peer: Implications for U.S. Nuclear Deterrence Strategy', Spring 2023, https://cgsr.llnl.gov/content/assets/docs/CGSR_Two_Peer_230314.pdf; and Heather Williams et al., 'Project Atom 2023: A Competitive Strategies Approach for U.S. Nuclear Posture Through 2035', Center for Strategic and International Studies, September 2023, https://csis-website-prod.s3.amazonaws.com/s3fs-public/2023-09/230929_Williams_ProjectAtom_2023.pdf.
- ⁴ See Jeffrey W. Knopf (ed.), *Security Assurances and Nuclear Nonproliferation* (Stanford, CA: Stanford University Press, 2012).
- ⁵ See Caitlin Talmadge, 'Multipolar Deterrence in the Emerging Nuclear Era', in Vipin Narang and Scott D. Sagan (eds), *The Fragile Balance of Terror* (Ithaca, NY: Cornell University Press, 2023), pp. 12–38.
- ⁶ See US Department of Defense, '2022 Nuclear Posture Review', p. 4.
- ⁷ See Talmadge, 'Multipolar Deterrence in the Emerging Nuclear Era'.
- ⁸ See Jeffrey W. Knopf, 'Varieties of Assurance', *Journal of Strategic Studies*, vol. 35, no. 3, April 2012, pp. 375–99.
- ⁹ See Heather Williams et al., 'Alternative Nuclear Futures: Capability and Credibility Challenges for U.S. Extended Nuclear Deterrence', Center for Strategic and International Studies, May 2023, https://csis-website-prod.s3.amazonaws.com/s3fs-public/2023-05/230508_Williams_AlternativeNuclearFutures.pdf.
- ¹⁰ See US Department of Defense, '2022 Nuclear Posture Review', pp. 3, 8, 11, 14. See also Alexander Mattelaer, 'Rethinking Nuclear Deterrence: A European Perspective', CSDS Policy Brief 13/2022, Centre for Security, Diplomacy and Strategy, 23 May 2022, https://brussels-school.be/sites/default/files/CSDS%20Policy%20brief_2213.pdf; and Adam Mount, 'The US and South Korea: The Trouble with Nuclear Assurance', *Survival*, vol. 65, no. 2, April–May 2023, pp. 123–40.

- 11 See Thomas C. Schelling, *Arms and Influence*, revised ed. (New Haven, CT: Yale University Press, 2008), pp. 4, 74. See also Matthew D. Cebul, Allan Dafoe and Nuno P. Monteiro, 'Coercion and the Credibility of Assurances', *Journal of Politics*, vol. 83, no. 3, July 2021, pp. 975–91; and Thomas J. Christensen et al., 'How to Avoid a War Over Taiwan', *Foreign Affairs*, 13 October 2022, <https://www.foreignaffairs.com/china/how-avoid-war-over-taiwan>.
- 12 US Department of Defense, '2022 Nuclear Posture Review', p. 9.
- 13 See Williams et al., 'Alternative Nuclear Futures', in which the term 'synchronisation challenge' was coined.
- 14 See Talmadge, 'Multipolar Deterrence in the Emerging Nuclear Era'.
- 15 See Knopf, 'Varieties of Assurance'; and Knopf, *Security Assurances and Nuclear Nonproliferation*.
- 16 On the distinction between horizontal and vertical proliferation, see Benoît Pélopidas, *Repenser les choix nucléaires* (Paris: Presses de Sciences Po, 2022).
- 17 See M. Eliane Bunn, 'Extended Nuclear Deterrence and Assuring Allies', in Charles Glaser, Austin Long and Brian Radzinsky (eds), *Managing U.S. Nuclear Operations in the 21st Century* (Washington DC: Brookings Institution Press, 2022), pp. 166–94.
- 18 See Glenn H. Snyder, 'The Security Dilemma in Alliance Politics', *World Politics*, vol. 36, no. 4, July 1984, pp. 461–95.
- 19 See Robert Jervis, 'Deterrence and Perception', *International Security*, vol. 7, no. 3, Winter 1982–83, pp. 3–30.
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- 21 See Bunn, 'Extended Nuclear Deterrence and Assuring Allies'.
- 22 See Tongfi Kim and Luis Simón, 'A Reputation Versus Prioritization Trade-off: Unpacking Allied Perceptions of US Extended Deterrence in Distant Regions', *Security Studies*, vol. 30, no. 5, December 2021, pp. 725–60.
- 23 See Tongfi Kim and Luis Simón, 'Power and Perceptions: How Allies View America's Reputation and Prioritisation After Ukraine', CSDS Policy Brief 16/2023, Centre for Security, Diplomacy and Strategy, 31 May 2023, https://csds.vub.be/wp-content/uploads/2023/09/CSDS-Policy-brief_2316.pdf.
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- 25 See Kim and Simón, 'Power and Perceptions'; and Evan Braden Montgomery, 'Primacy and Punishment: US Grand Strategy, Maritime Power, and Military Options to Manage Decline', *Security Studies*, vol. 29, no. 4, August 2020, pp. 769–96.
- 26 Henry, *Reliability and Alliance Interdependence*, p. 17.
- 27 See Ankit Panda and Vipin Narang, 'Sole Purpose Is Not No First Use: Nuclear Weapons and Declaratory

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- ²⁹ See Dallas Boyd, 'Challenging Nuclear Bromides', *Survival*, vol. 65, no. 5, October–November 2023, pp. 75–94.
- ³⁰ See *ibid.*; and Charles L. Glaser, James M. Acton and Steve Fetter, 'The U.S. Nuclear Arsenal Can Deter Both China and Russia', *Foreign Affairs*, 5 October 2023, <https://www.foreignaffairs.com/united-states/us-nuclear-arsenal-can-deter-both-china-and-russia>.
- ³¹ See Center for Global Security Research, 'China's Emergence as a Second Nuclear Peer'.
- ³² See Glaser, Acton and Fetter, 'The US Nuclear Arsenal Can Deter Both China and Russia'.
- ³³ See Scott D. Sagan and Kenneth Waltz, *The Spread of Nuclear Weapons: A Debate Renewed* (New York: W. W. Norton & Co., 2002).
- ³⁴ See Talmadge, 'Multipolar Deterrence in the Emerging Nuclear Era', p. 23.
- ³⁵ US Department of Defense, '2022 Nuclear Posture Review', p. 6. See also Brad Roberts, 'Tripolar Stability: The Future of Nuclear Relations Among the United States, Russia, and China', IDA Paper P-3727, Institute for Defense Analyses, September 2002, <https://apps.dtic.mil/sti/tr/pdf/ADA409682.pdf>; and Talmadge, 'Multipolar Deterrence in the Emerging Nuclear Era', p. 23.
- ³⁶ See Talmadge, 'Multipolar Deterrence in the Emerging Nuclear Era'.
- ³⁷ See Brendan R. Green, *The Revolution that Failed: Nuclear Competition, Arms Control, and the Cold War* (Cambridge: Cambridge University Press, 2020), pp. 21–3; and Talmadge, 'Multipolar Deterrence in the Emerging Nuclear Era', p. 25.
- ³⁸ See Paul Avey, 'Just Like Yesterday? New Critiques of the Nuclear Revolution', *Texas National Security Review*, vol. 6, no. 2, Spring 2023, pp. 9–31.
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- 42 See ‘Book Review Roundtable: The Meaning of the Nuclear Revolution 30 Years Later’, *Texas National Security Review*, 30 April 2020, <https://tnsr.org/roundtable/book-review-roundtable-the-meaning-of-the-nuclear-revolution-30-years-later/>; Brendan Green and Austin Long, ‘The MAD Who Wasn’t There: Soviet Reactions to the Late Cold War Nuclear Balance’, *Security Studies*, vol. 26, no. 4, October 2017, pp. 606–41; Matthew Kroenig, *The Logic of American Nuclear Strategy: Why Strategic Superiority Matters* (Oxford: Oxford University Press, 2018); Lieber and Press, *The Myth of the Nuclear Revolution*; and Weede, ‘Some (Western) Dilemmas in Managing Extended Deterrence’.
- 43 See ‘Book Review Roundtable’.
- 44 See Thomas C. Schelling, *The Strategy of Conflict* (Cambridge, MA: Harvard University Press, 1960).
- 45 See Anna Clara Arndt, Liviu Horovitz and Lydia Wachs, ‘The US “Sole Purpose” Debate: A Background’, SWP Working Paper no. 3, Stiftung Wissenschaft und Politik, December 2021; and Brad Roberts, ‘On Creating the Conditions for Nuclear Disarmament: Past Lessons, Future Prospects’, *Washington Quarterly*, vol. 42, no. 2, Summer 2019, pp. 7–30.
- 46 See George Bunn and Roland M. Timerbaev, ‘Security Assurances to Non-nuclear-weapons States’, *Nonproliferation Review*, vol. 1, no. 1, Fall 1993, p. 13. See also Virginia Foran (ed.), *Security Assurances: Implications for the NPT and Beyond* (Washington DC: Carnegie Endowment for International Peace, 1995); and US Department of State, ‘Secretary Anthony J. Blinken’s Remarks to the Nuclear Non-Proliferation Treaty Review Conference’, 1 August 2022, <https://www.state.gov/secretary-antony-j-blinkens-remarks-to-the-nuclear-non-proliferation-treaty-review-conference/>.
- 47 See Joseph F. Pilat, ‘Reassessing Security Assurances in a Unipolar World’, *Washington Quarterly*, vol. 28, no. 2, Spring 2005, pp. 159–70.
- 48 See George Bunn, ‘The Legal Status of U.S. Negative Security Assurances to Non-nuclear Weapon States’, *Nonproliferation Review*, vol. 4, no. 3, Spring–Summer 1997, pp. 1–17; and Pilat, ‘Reassessing Security Assurances in a Unipolar World’.
- 49 See Pilat, ‘Reassessing Security Assurances in a Unipolar World’.
- 50 See Stephan Frühling and Andrew O’Neil, ‘Alliances and Nuclear Risk: Strengthening US Extended Deterrence’, *Survival*, vol. 64, no. 1, February–March 2022, pp. 77–98; and Knopf, ‘Varieties of Assurance’, p. 389.
- 51 Knopf, ‘Varieties of Assurance’, p. 389.
- 52 See Paul Meyer and Tom Sauer, ‘The Nuclear Ban Treaty: A Sign of Global Impatience’, *Survival*, vol. 60, no. 2, April–May 2018, pp. 61–72.
- 53 See Knopf, *Security Assurances and Nuclear Nonproliferation*.
- 54 See Mount, ‘The US and South Korea’; and Lauren Sukin and Toby Dalton,

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