

When Actions Speak Louder Than Words

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Adversary Perceptions of Nuclear No-First-Use Pledges

Should the United States publicly forswear nuclear first use, committing to employ nuclear weapons only in response to adversary nuclear attack? This question has recurred numerous times in debates over U.S. declaratory policy going back to the Cold War.¹ Most recently, the Joe Biden administration opted against adopting a nuclear no-first-use (NFU) pledge in its 2022 *Nuclear Posture Review*, primarily because of U.S. allies' concerns about the implications for extended deterrence.² This decision echoed an earlier debate in the Barack Obama administration, which also twice seriously considered adopting NFU but opted against it, again largely owing to the concerns of allies.³ Yet the issue persists, as members of the House and Senate continue to introduce bills and resolutions seeking to commit the United States to NFU.⁴

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1. Morton H. Halperin, *A Proposal for a Ban on the Use of Nuclear Weapons*, Study Memorandum 4 (Washington, DC: Institute for Defense Analyses, Special Studies Group, 1961), pp. 1–23, <https://stars.library.ucf.edu/prism/554/>.

2. The administration also considered and rejected a “sole purpose” formulation. Demetri Sevastopulo and Felicia Schwartz, “Biden Avoids Radical Shift in New Nuclear Weapons Policy,” *Financial Times*, October 27, 2022, <https://www.ft.com/content/05b71f9a-0fbb-4be5-821a-d2d50b611005>.

3. Brad Roberts, “Debating Nuclear No-First-Use, Again,” *Survival*, Vol. 61, No. 3 (2019), pp. 39–56, <https://doi.org/10.1080/00396338.2019.1614788>.

4. Brian Radzinsky, “Democratic Candidates Are Debating a Nuclear ‘No First Use Policy.’ What Does that Mean?,” *Monkey Cage* (blog), *Washington Post*, August 2, 2019, <https://www.washingtonpost.com/politics/2019/08/02/democratic-candidates-are-debating-nuclear-no-first-use-policy-what-does-that-mean/>; Paul Sonne, “Top Democrats Introduce Bill to Prevent U.S. from Striking First with Nuclear Weapons,” *Washington Post*, January 30, 2019, https://www.washingtonpost.com/world/national-security/top-democrats-introduce-bill-to-prevent-us-from-striking-first-with-nuclear-weapons/2019/01/30/a5959ee6-24bc-11e9-ba08-caf4ff5a3433_story

Advocates of NFU emphasize a number of benefits that they argue would accrue from such a pledge, including strengthening crisis stability, decreasing hostility among nuclear-armed states, and bolstering nonproliferation and arms control goals.⁵ But these arguments depend to varying degrees on U.S. adversaries finding a change in U.S. declaratory policy credible—that is, opponents need to believe that an NFU pledge really would reduce the likelihood that the United States would use nuclear weapons first. If opponents do not find such a commitment credible, then the U.S. NFU pledge will not activate many of the salutary effects that advocates claim. Despite the centrality of adversary perceptions to the logic of pro-NFU arguments, there has been little systematic study of them—even though evidence is available from instances in which the Soviet Union (1977–1991), China (1964–present), and India (1999–present) have made such pledges.⁶ This article leverages such evidence to examine the conditions under which NFU pledges are more or less credible to adversaries.

Our main finding is that these favorable conditions are stringent and rarely

.html; Restricting First Use of Nuclear Weapons Act of 2023, H.R. 669, 118th Cong., 1st sess., January 31, 2023, <https://www.congress.gov/bill/118th-congress/house-bill/669?q=%7B%22search%22%3A%22nuclear%22%7D&s=1&r=3>; Embracing the Goals and Provisions of the Treaty on the Prohibition of Nuclear Weapons, H.Res. 77, 118th Cong., 1st sess., January 31, 2023, <https://www.congress.gov/bill/118th-congress/house-resolution/77/text?s=1&r=10&q=%7B%22search%22%3A%22nuclear%22%7D>; Restricting First Use of Nuclear Weapons Act of 2023, S. 1186, 118th Cong., 1st sess., April 28, 2023, <https://www.congress.gov/bill/118th-congress/senate-bill/1186?q=%7B%22search%22%3A%22nuclear+warren%22%7D&s=2&r=1>.

5. See among others John P. Holdren, “The Overwhelming Case for No First Use,” *Bulletin of the Atomic Scientists*, Vol. 76, No. 1 (2020), pp. 3–7, <https://doi.org/10.1080/00963402.2019.1701277>; Scott D. Sagan, “The Case for No First Use,” *Survival*, Vol. 51, No. 3 (2009), pp. 163–182, <https://doi.org/10.1080/00396330903011545>; Michael S. Gerson, “No First Use: the Next Step for U.S. Nuclear Policy,” *International Security*, Vol. 35, No. 2 (Fall 2010), pp. 7–47, https://doi.org/10.1162/ISEC_a_00018; Kingston Reif and Daryl G. Kimball, “Rethink Oldthink on No First Use,” *Arms Control Now* (blog), Arms Control Association, August 29, 2016, <https://www.armscontrol.org/blog/2016-08-29/rethink-oldthink-first-use>; Nina Tannenwald, “It’s Time for a U.S. No-First-Use Nuclear Policy,” *Texas National Security Review*, Vol. 2, No. 3 (2019), pp. 130–137, <https://tnsr.org/roundtable/its-time-for-a-u-s-no-first-use-nuclear-policy/>; Steve Fetter and Jon Wolfsthal, “No First Use and Credible Deterrence,” *Journal for Peace and Nuclear Disarmament*, Vol. 1, No. 1 (2018), pp. 102–114, <https://doi.org/10.1080/25751654.2018.1454257>.

6. Two important recent exceptions in the policy literature are Matthew R. Costlow, *A Net Assessment of “No First Use” and “Sole Purpose” Nuclear Policies*, Occasional Paper 7 (Fairfax, VA: National Institute of Public Policy, 2021), pp. 1–131, <https://nipp.org/wp-content/uploads/2021/07/OP-7-for-web-final.pdf>; and William A. Chambers et al., *No-First Use of Nuclear Weapons: A Policy Assessment*, IDA Paper P-20513 (Alexandria, VA: Institute for Defense Analyses, 2021), pp. 1–84. These excellent studies examine some of the same cases as our article, though our overall argument and approach differ. In addition, a 2011 special issue of the *Nonproliferation Review* raises similar general questions regarding other states’ perceptions of the U.S. *Nuclear Posture Review* and potential adoption of NFU. See especially Sagan and Vaynman, “Introduction: Reviewing the Nuclear Posture,” *Nonproliferation Review*, Vol. 18, No. 1 (March 2011), pp. 17–37, <https://doi.org/doi:10.1080/10736700.2011.549169>.

arise. We theorize that NFU pledges are credible only when the political relationship between a state and its adversary is relatively benign, or, if the relationship is hostile, when the state's military has virtually no ability to engage in nuclear first use against the adversary. Indeed, hostile political relations combined with even latent first use capabilities will lead adversaries to distrust NFU pledges. The intensity of this distrust will vary with the intensity of these political and military indicators, but the record of adversary perceptions suggests that the alignment of favorable conditions is often elusive.

In short, NFU credibility must meet a high bar in the cases in which it is most relevant, and as an empirical matter it is rarely met. Nor is there evidence that NFU pledges themselves somehow bring about these conditions. The implication is that changes to U.S. declaratory policy alone are unlikely to convince adversaries to disregard the prospect of U.S. nuclear first use in the absence of other major changes in these countries' political relationships or U.S. nuclear force posture. Thus, the independent salutary effects of a NFU pledge are likely to be more minimal than advocates often claim.

Our analysis proceeds in seven sections. First, we review the logic of NFU arguments to highlight the centrality of adversary perceptions to the purported NFU benefits of crisis stability, improved relations, and nonproliferation and arms control. Second, we draw on the costly signaling literature to theorize about the political and military conditions under which an NFU pledge will be credible. Third, we discuss our research strategy for testing this theory across the available evidence regarding adversary perceptions of NFU pledges by the Soviet Union, China, and India. The fourth, fifth, and sixth sections of the article examine adversary perceptions of each of these countries' pledges, comparing the predictions of our theory with those generated by the conventional wisdom about the benefits of NFU pledges. Overall, we find support for our argument that the political and military conditions required for NFU pledge credibility are stringent and difficult, though not impossible, to meet. We conclude with a discussion of the broader implications.

No-First-Use Pledges and Their Purported Benefits

Although NFU formulations vary, all at heart commit a state to not use nuclear weapons first in a future conflict. As Nina Tannenwald puts it, NFU is a "pledge to use nuclear weapons only in retaliation for a nuclear attack."⁷ Thus,

7. Tannenwald, "It's Time for a U.S. No-First-Use Nuclear Policy," p. 131.

NFU commits a state not to asymmetrically escalate a conventional conflict or respond to non-nuclear strategic attacks (e.g., a devastating cyberattack) with nuclear weapons.⁸ A strict NFU may also preclude the preemptive use of nuclear weapons even if adversary preparations for imminent nuclear use are detected, a distinction to which we return later.

It is worth noting that since 1978 the United States has communicated a “negative security assurance” toward non-nuclear weapons states, broadly committing it not to use or threaten to use nuclear weapons against them.⁹ This could be viewed as a form of NFU, but it arguably faces an even higher bar to credibility than an NFU toward a nuclear-armed adversary, because a state violating a negative security assurance toward a non-nuclear adversary faces no threat of nuclear retaliation. This reality makes the question of examining NFU pledges toward *nuclear*-armed adversaries a more logical place to start; if non-use commitments are credible anywhere, it should be when facing a threat of nuclear retaliation. Furthermore, as elaborated in the next section, claims about the potential benefits of a distinct U.S. NFU hinge heavily (though not entirely) on the effects that such a pledge would have on the behavior of other *nuclear*-armed states. Therefore, we focus on NFU pledges that commit a state not to use nuclear weapons first against nuclear-armed adversaries, though additional research could profitably explore the effects of negative security assurances as well.¹⁰

Advocates make a variety of arguments about the potential benefits of a U.S. NFU pledge. Three of the most important are that NFU declarations improve crisis stability, decrease hostility among nuclear-armed states, and bolster non-proliferation and arms control cooperation among adversaries. Although these claims differ, we argue that to varying degrees they all require a U.S. NFU pledge to be viewed as credible by U.S. adversaries in order to generate the benefits that NFU advocates envision. That is, opponents would need to believe that such a pledge significantly reduces or eliminates the likelihood of being subject to nuclear first use for there to be a major improvement in each

8. On this category, see Fabian Hoffman and William Alberque, *Non-Nuclear Weapons with Strategic Effect: New Tools of Warfare?* (Washington, DC: International Institute for Strategic Studies, 2022), pp. 1–10, <https://www.iiss.org/en/research-paper/2022/03/non-nuclear-weapons-with-strategic-effect-new-tools-of-warfare/>.

9. Daryl Kimball et al., “U.S. Negative Security Assurances at a Glance,” Fact Sheets and Briefs, Arms Control Association, March 2018, <https://www.armscontrol.org/factsheets/negsec>.

10. For promising efforts in this direction, see Harald Muller, “A Nuclear Nonproliferation Test: Obama’s Nuclear Policy and the 2010 NPT Review Conference,” *Nonproliferation Review*, Vol. 18, No. 1 (2011), pp. 219–236, <https://doi.org/10.1080/10736700.2011.549182>.

area—especially regarding the first two benefits of improving crisis stability and easing political hostility. We review the logic of all three claims next.

NFU AND CRISIS STABILITY

Proponents of NFU argue that adoption improves crisis stability because it reduces the likelihood that an opponent would experience incentives or pressures to escalate to the use of nuclear weapons. This is not a new claim; it appears, for example, in Morton Halperin's early Cold War writings on how an NFU declaration could quell the adversary's "pre-emptive urge to use nuclear weapons" and make it less likely to take steps that could lead to inadvertent nuclear use.¹¹

More recently, Michael Gerson writes, "A credible NFU policy will help decrease an opponent's concerns about a U.S. first strike, thereby decreasing the possibility that nuclear weapons are used accidentally, inadvertently, or deliberately in a severe crisis."¹² Specifically, he argues that an opponent who is confident that the United States will never use nuclear weapons first will be much less likely to "take dangerous measures to increase the survivability of its forces and help ensure nuclear retaliation, such as adopting a launch-on-warning posture, rapidly dispersing forces, raising alert levels and mating warheads to missiles, or pre-delegating launch authority to field commanders."¹³ These measures could heighten the prospect of accidental or inadvertent use. Gerson argues that an adversary confident that it will not be subject to a first strike is much more likely to refrain from deliberate escalation as well; both the use-or-lose and "escalate to de-escalate" motives for first use by the adversary would be greatly reduced if the United States adopted an NFU pledge, in his view.¹⁴ Daryl Kimball and Kingston Reif advance similar claims, noting that "a clear US no-first-use policy would reduce the risk of Russian or Chinese nuclear miscalculation during a crisis by alleviating concerns about a devastating US nuclear first strike."¹⁵

Crucially, these crisis stability mechanisms require a nuclear-armed adversary to actually believe that the declaring state's NFU pledge is credible. The stabilizing effects do not come from the pledge *per se*, but rather from the adversary's belief that the pledge means it will not be subject to first use. If an

11. Halperin, "A Proposal for a Ban," p. 13.

12. Gerson, "No First Use," p. 39.

13. *Ibid.*, p. 37.

14. *Ibid.*, pp. 38–39.

15. Reif and Kimball, "Rethink Oldthink on No First Use," p. 2.

adversary is still concerned about such use, then all the dangers outlined above should presumably persist. Adversaries would still feel the same pressures to anticipate the problem of being struck first, which could lead them to adopt a launch-on-warning posture, raise alert levels, pre-delegate launch authority, and so on—all actions that could fuel crisis instability. The key question is thus whether NFU pledges lead nuclear-armed opponents to discount the likelihood of nuclear first use by their opponent. Without this belief, there is no reason to expect states to change their behavior in a nuclear crisis in the ways that NFU advocates argue are stabilizing.

NFU AND DECREASED POLITICAL HOSTILITY

A second major argument advanced by proponents of NFU is that such a pledge can decrease political hostility between nuclear-armed adversaries, improving the overall relationship by advancing cooperative norms. Again, this is not a new claim. For example, in a famous 1982 essay in *Foreign Affairs*, McGeorge Bundy, George Kennan, Robert McNamara, and Gerard Smith advocate a U.S. NFU pledge in part because they believe that it would help pacify the relationship with the Soviet Union.¹⁶

More recently, Tannenwald, Scott Sagan, Jane Vaynman, and Gerson each argue that an NFU declaration can change an adversary's perception of the threat posed by the declaring state.¹⁷ By issuing an NFU declaration, a state reassures its adversary that nuclear weapons are off the table because they are different from other types of weapons. It also eases the problem of offense-defense indistinguishability, assuring adversaries that even capabilities (nuclear-tipped missiles) that might be used for offense (first use) will be used only for defense (second-strike retaliation).¹⁸ For example, an NFU declaration could assure adversaries that plans to modernize nuclear weapons or to expand missile defense systems are for only defensive purposes, not part of an effort to develop a first-strike capability.¹⁹

Yet it is worth noting that adversary perceptions of the credibility of the pledge are again central to the logic of these arguments. If the commitment to

16. McGeorge Bundy et al., "Nuclear Weapons and the Atlantic Alliance," *Foreign Affairs*, Vol. 60, No. 4 (Spring 1982), pp. 753–768, <https://doi.org/10.2307/20041171>.

17. See Tannenwald, "It's Time for a U.S. No-First-Use Nuclear Policy"; Sagan and Vaynman, "Introduction"; Gerson, "No First Use."

18. Sagan and Vaynman, "Introduction," p. 27.

19. Morton H. Halperin et al., "Forum: The Case for No First Use; an Exchange," *Survival*, Vol. 51, No. 5 (2009), p. 20, <https://doi.org/10.1080/00396330903309840>.

NFU is seen as insincere, then it is hard to see how such a commitment can generate political goodwill or new norms, because adversaries will not alter their assessment of the United States' type. In fact, as Martha Finnemore notes, a disconnect between words and actions can have the opposite effect, generating accusations of hypocrisy or deceit.²⁰ Importantly, constructivists emphasize the centrality of actions, not just speech, in socializing and consolidating norms.²¹ This distinction suggests that NFU pledges are unlikely to transform relationships if they are not seen as credible signals of a change in what a state actually intends to do with respect to the first use of nuclear weapons. Thus, the question of when an adversary will find NFU credible—that is, when it will change perceptions of the likelihood of being subject to nuclear first use—remains important to understanding whether the hypothesized political benefits of NFU will materialize.

NFU, NONPROLIFERATION, AND ARMS CONTROL

A third argument advanced by NFU proponents is that an NFU pledge would further the goals of nonproliferation and arms control, potentially even leading other states to adopt a reciprocal NFU pledge. NFU advocates argue that U.S. adoption of an NFU pledge would strengthen the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT) by signaling a genuine U.S. commitment under Article VI to reduce the role of nuclear weapons.²² Such a pledge would lessen the perceived hypocrisy inherent in U.S. efforts to stop other states from acquiring nuclear weapons while simultaneously retaining first-use options.²³ As John Holdren puts it, a U.S. NFU pledge would “devalue the currency of nuclear weapons in world affairs.”²⁴

Furthermore, an NFU declaration might reduce the practical incentives for states to acquire or keep nuclear weapons, because other states look to U.S. declaratory policy to justify their nuclear programs. For example, North Korea claimed that the first-use option in the United States' 2010 *Nuclear Posture*

20. Martha Finnemore, “Legitimacy, Hypocrisy, and the Social Structure of Unipolarity: Why Being a Unipole Isn’t All It’s Cracked Up to Be,” *World Politics*, Vol. 61, No. 1 (2009), pp. 73–76, <https://doi.org/10.1017/S0043887109000082>.

21. Martha Finnemore and Kathryn Sikkink, “International Norm Dynamics and Political Change,” *International Organization*, Vol. 52, No. 4 (1998), pp. 902–905, <https://doi.org/10.1162/002081898550789>; Paul Kowert and Jeffrey Legro, “Norms, Identity, and Their Limits: A Theoretical Reprise,” in Peter J. Katzenstein, ed., *The Culture of National Security: Norms and Identity in World Politics* (New York: Columbia University Press, 1996), p. 485.

22. Gerson, “No First Use,” p. 42.

23. Holdren, “The Overwhelming Case for No First Use,” p. 4.

24. *Ibid.*, p. 3.

Review justified Pyongyang's expansion of its nuclear arsenal.²⁵ More broadly, a U.S. NFU declaration might strengthen the norm of nuclear non-use, leading other states to behave more responsibly with their nuclear arsenals and even to reciprocate the pledge.²⁶ Sagan and Vaynman argue that the United States can shape global understandings of "how responsible states behave" with nuclear weapons.²⁷ Friendly states might go so far as to replicate language from the U.S. policy in their own statements.²⁸ Tannenwald even argues that "a U.S. NFU policy would create political space for Russia to follow suit."²⁹

Again, though, these arguments at least partially require that other states interpret the NFU pledge as actually decreasing the likelihood of U.S. nuclear first use. If other states judge the U.S. pledge as empty rhetoric, then it is hard to see why it would change those states' views of either U.S. nuclear intentions (the mechanism that could help jump-start arms control with other nuclear-armed states) or the value of nuclear weapons (the mechanism that could strengthen nonproliferation). The logic of these claims hinges on whether other states, especially nuclear-armed opponents, believe that the United States is reducing its reliance on nuclear weapons, which is what might pave the way for them to do so as well.

It is possible that an NFU pledge might also promote nonproliferation through another mechanism: by appearing to *non-nuclear* states to make progress on Article VI, even if such a pledge lacked credibility with nuclear-armed opponents. Perhaps such a gesture would lead non-nuclear states to be more supportive of nonproliferation efforts (such as containing Iran's nuclear program), thereby reinforcing the fundamental bargain of the NPT. This potential benefit of NFU would be less dependent on nuclear adversaries' perceptions of credibility than the crisis stability and political hostility claims, though assessing its ultimate value requires research beyond what we attempt here. Regardless, the question of adversary perceptions of the likelihood of U.S. nuclear first use is still central to the other proliferation and arms control mechanisms, as well as to the benefits of crisis stability and improved political relations. We therefore focus on these perceptions in this article, while acknowledging that NFU can also be aimed at other audiences.

25. Gerson, "No First Use," p. 42.

26. Nina Tannenwald, *The Nuclear Taboo: The United States and the Non-Use of Nuclear Weapons since 1945* (Cambridge: Cambridge University Press, 2007).

27. Sagan and Vaynman, "Introduction," p. 30.

28. Gerson, "No First Use," p. 41.

29. Tannenwald, "It's Time for a U.S. No-First-Use Nuclear Policy," p. 135.

A Theory of Adversary Perceptions of NFU Credibility

At times, NFU advocates seem to suggest that such pledges generate their own credibility through the mechanism of audience costs. For example, Sagan and Vaynman write that there are domestic and international costs to backing away from a stated declaratory policy “once a posture change is announced and defended publicly.”³⁰ Yet a significant literature questions audience costs as an effective mechanism for costly signaling, even by democracies, raising doubts about whether this mechanism alone would lead adversaries to alter their assessments of the risk of being subject to first use.³¹

At other times, NFU advocates explicitly stipulate that any U.S. NFU declaration must be accompanied by various other policy changes. For example, elsewhere Sagan states that “no-first-use doctrines can be made more credible (that is, more likely to be believed) to the degree that nuclear operations,” such as alert levels, military exercises, and deployments, “conform to such a doctrine,” because these are the activities that actually influence perceptions.³² Similarly, Tannenwald is clear that “doctrinal and operational changes would need to follow such a declaration.”³³

This more conditional view of NFU benefits comports with the large international relations literature demonstrating the difficulty of making credible threats and promises.³⁴ Information is ambiguous, and states have incentives to misrepresent their intentions. This is why, as Thomas Schelling pointed out long ago, states often put great effort into “projecting intentions” through their actions, not simply their words.³⁵ James Fearon also incorporates this insight

30. Sagan and Vaynman, “Introduction,” p. 28.

31. Jack Snyder and Erica D. Borghard, “The Cost of Empty Threats: A Penny, Not a Pound,” *American Political Science Review*, Vol. 105, No. 3 (2011), pp. 437–456, <https://doi.org/10.1017/S000305541100027X>; Alexander B. Downes and Todd S. Sechser, “The Illusion of Democratic Credibility,” *International Organization*, Vol. 66, No. 3 (2012), pp. 457–489, <https://doi.org/10.1017/S0020818312000161>; Marc Trachtenberg, “Audience Costs: An Historical Analysis,” *Security Studies*, Vol. 21, No. 1 (2012), pp. 3–42, <https://doi.org/10.1080/09636412.2012.650590>.

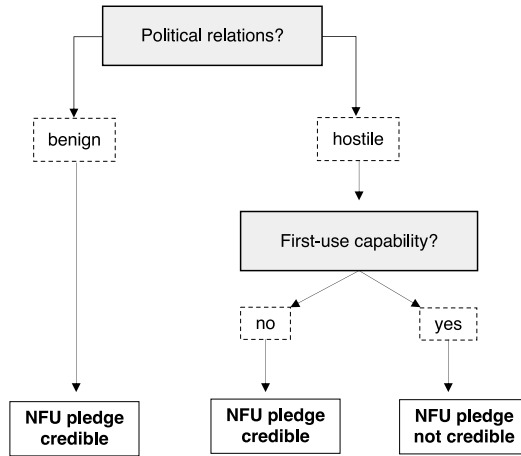
32. Sagan, “The Case for No First Use,” p. 177.

33. Tannenwald, “It’s Time for a U.S. No-First-Use Nuclear Policy,” p. 136.

34. See, for example, Thomas C. Schelling, *Arms and Influence* (New Haven, CT: Yale University Press, 1966); James D. Fearon, “Rationalist Explanations for War,” *International Organization*, Vol. 49, No. 3 (Summer 1995), pp. 379–414, <https://doi.org/10.1017/S0020818300033324>; Robert Jervis, *Perception and Misperception in International Politics* (Princeton, NJ: Princeton University Press, 1976); Anne E. Sartori, *Deterrence by Diplomacy* (Princeton, NJ: Princeton University Press, 2005); Paul C. Avey, *Tempting Fate: Why Non-Nuclear States Confront Nuclear Opponents* (Ithaca, NY: Cornell University Press, 2019); Todd S. Sechser and Matthew Fuhrmann, *Nuclear Weapons and Coercive Diplomacy* (Cambridge: Cambridge University Press, 2017).

35. Schelling, *Arms and Influence*, 36.

Figure 1. Adversary Perceptions of No-First-Use (NFU) Credibility



into the bargaining model of war, noting that costless signals—that is, foreign policy announcements that do not alter either side’s payoffs—do not alter the risk of war.³⁶ He and Schelling emphasize the problem of deterrence, but the same logic about cheap talk should apply to attempts at reassurance, thus raising the question of when an NFU pledge will actually lower an adversary’s estimate of its likelihood of being subject to first use.

We build on these insights by explicitly theorizing about the political and military conditions required for an adversary to view an NFU pledge as credible. Specifically, we conceptualize adversary perceptions as a two-step decision tree, summarized in figure 1. In the first step, a state’s adversary examines the political relationship to assess the credibility of the state’s NFU declaration. If the relationship is benign, the other state is likely to rate the pledge as credible, regardless of the declaring state’s military posture (though, of course, these are also cases in which the pledge is least needed). If the political relationship is hostile, the adversary will continue to the second step in the decision tree, evaluating the state’s military posture to assess whether it actually has the capability to engage in nuclear first use against the adversary. If a hostile state has even a minimal first-use capability, then the adversary is likely to discount the credibility of the pledge. Only if a hostile state has virtually no military ability to strike first is the adversary likely to accept the NFU pledge

36. Fearon, “Rationalist Explanations for War,” pp. 396–401.

as credible (though the need for such a pledge is again by definition minimal in such cases).

Regarding the first step in the decision tree, an adversary seeking to assess the credibility of a state's NFU pledge will look to the overall tenor of the bilateral relationship. Is the relationship cordial and trusting, or hostile and tense? Is there a serious possibility of war, or not? At one extreme, if two nuclear-armed states are longtime treaty allies, then it is safe to assume that war between them is extremely unlikely; the two have made a costly investment in a good relationship and should not be characterized as "adversaries" at all. The idea that one will subject the other to nuclear first use is unthinkable, no matter which nuclear posture either side adopts. Thus, in a benign relationship, the other state is likely to accept the declaring state's NFU pledge as credible toward itself, irrespective of whether the state has military capabilities for first use (which will most likely be viewed as aimed at other actors). At the other extreme, however, if two nuclear-armed states have a relationship characterized by distrust, disputes, militarized crises, and past wars or serious concerns about future war, the adversary is unlikely to trust the assurances of an NFU pledge without closer examination of the state's military posture.

The adversary will thus proceed to the second step in the decision tree, assessing the state's nuclear posture. After all, bad political relations with a nuclear-armed state generate inherent concern about the prospect of being subject to nuclear first use in war—if a conventional deterrence failure is possible, then how can the adversary rule out a nuclear one? Adversaries will seek to assess whether the state's nuclear arsenal is able to engage in any form of nuclear first use. Such use could include limited asymmetric coercive escalation against either countervalue or counterforce targets, as well as the more demanding mission of nuclear preemption, or a mix of the two. The key point is that if there is even a latent military capability for some type of nuclear first use, the adversary is unlikely to accept an NFU pledge as credible.

By contrast, two reassuring indicators that a state was not preparing for rapid nuclear escalation in a conventional war would be keeping nuclear forces recessed or in a lower state of readiness in peacetime and maintaining significant civilian controls on nuclear use. A state that does not have missiles mated to warheads in peacetime or that has cumbersome procedures to authorize launches simply cannot make credible threats to quickly escalate for coercive purposes in war. Similarly, a state lacking counterforce capabilities against hard targets would pose little threat of a bolt from the blue, regardless of its declaratory policy.

That said, even a recessed peacetime posture oriented toward countervalue retaliation can, in a crisis or conflict, quickly generate into a nuclear force eminently capable of coercive asymmetric escalation or preemption, depending on the balance of forces. Consequently, we expect that a state is likely to accept an adversary's NFU pledge only when the adversary's arsenal is militarily virtually incapable of striking first in a crisis or conflict—for example, if it lacks weapons of sufficient range. Otherwise, an adversary is likely to worry that a hostile state might still resort to nuclear first use in extremis, regardless of what the state says or does in peacetime. Thus, peacetime posture may offer some reassurance but is unlikely to assuage worst-case thinking unless it indicates a likely lack of wartime capability.

Overall, the implication is that NFU credibility faces a high bar in terms of both the political and military conditions required. Bilateral relations must be quite good, or if they are not, then nuclear first-use capability by the pledging state must be essentially nil. As a result, NFU pledges will almost by definition lack credibility in the relationships in which they are most needed—the ones characterized by political hostility and actual military capability for first use.

Finally, we note that for simplicity figure 1 depicts our variables as categorical, though in reality each exists along a spectrum. Political relations fluctuate, as do military capabilities, and both involve multiple dimensions. Yet given detailed empirical evidence, it should still be possible to assess the nature of and the direction of trends in both variables. Similarly, as political relations and military capabilities vary, adversary perceptions of NFU credibility should vary as well. For example, relations that shift from hostile to benign, or vice versa, should prompt an opponent to reassess the probability of nuclear first use, as should improvements or declines in nuclear first-use capabilities within hostile dyads. Ultimately, the question is whether adversary perceptions change relative to their baseline and in what direction.

Testing the Argument

To test our argument, we examine adversary perceptions of the three nuclear states that have made NFU pledges to other nuclear states: the Soviet Union, China, and India. This trio generates seven politically relevant dyads that constitute candidate cases for our analysis (see table 1). Unfortunately, open-source English-language information on Chinese perceptions of the Soviet and Indian NFU pledges is scarce, as is evidence on Soviet/Russian perceptions of China's NFU. This data scarcity prevents us from fully testing our argument in

Table 1. Candidate Cases of Adversary Perceptions of No-First-Use (NFU) Pledges

Dyad	Period
U.S. perceptions of Soviet NFU pledge	1977–1991
Chinese perceptions of Soviet NFU pledge	1977–1991
Soviet/Russian perceptions of Chinese NFU pledge	1964–present
U.S. perceptions of Chinese NFU pledge	1964–present
Indian perceptions of Chinese NFU pledge	1964–present
Pakistani perceptions of Indian NFU pledge	1999–present
Chinese perceptions of Indian NFU pledge	1999–present

NOTE: China and Russia also committed to a little-known bilateral NFU pledge in 2001. We exclude this case from our dataset because it is a bilateral treaty rather than a general pledge, but it could be a fruitful topic for further research. See Article 2 in the Treaty of Good-Neighborliness and Friendly Cooperation between the People’s Republic of China and the Russian Federation, Ministry of Foreign Affairs, People’s Republic of China, July 16, 2001, <https://web.archive.org/web/20110605071535/http://www.fmprc.gov.cn/eng/wjdt/2649/t15771.htm>.

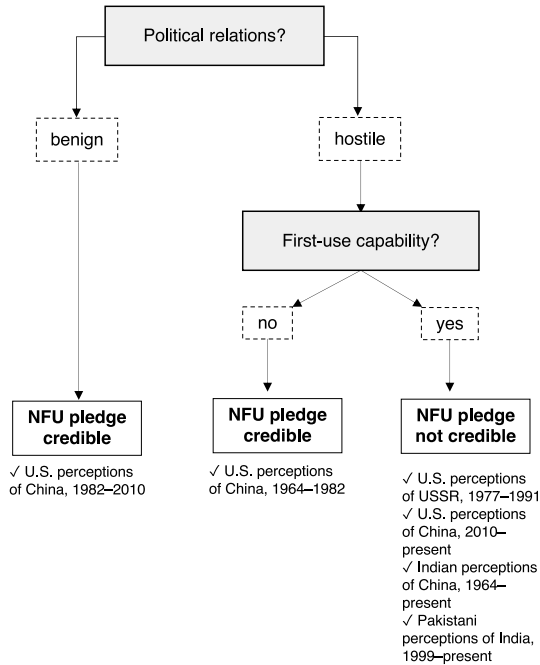
Table 2. Examined Cases of Adversary Perceptions of No-First-Use (NFU) Pledges

Dyad	Period
U.S. perceptions of Soviet NFU pledge	1977–1991
U.S. perceptions of Chinese NFU pledge	1964–1982
U.S. perceptions of Chinese NFU pledge	1982–2010
U.S. perceptions of Chinese NFU pledge	2010–present
Indian perceptions of Chinese NFU pledge	1964–present
Pakistani perceptions of Indian NFU pledge	1999–present

those three dyads. For the other four dyads, however, we were able to locate adequate source materials regarding adversary perceptions of NFU pledges, and there is no reason to think that these cases are somehow systematically different from the cases that we are unable to study in a manner that would bias our findings. Moreover, in one of the data-rich dyads—U.S. perceptions of China’s NFU pledge—we observe two major episodes of change over time in either the political or military variables, or both, enabling us to engage in additional tests of our argument. In other words, that dyad generates three cases. We thus examine six cases in total (see table 2).

For each case, we code the political and (where relevant) military variables in our theory’s decision tree and then examine the outcome in terms of adversary perceptions of the credibility of NFU pledges. We draw on secondary sources, public statements, and voluminous declassified intelligence estimates to trace the reasoning behind adversary assessments. This reasoning is impor-

Figure 2: Cases of Adversary Perceptions of No-First-Use (NFU) Credibility



tant because our theory makes predictions about both an outcome (whether a pledge will be considered credible) and a process (the political and military factors that matter most in determining said credibility). Overall, the empirical results strongly support the predictions of our theory. In fact, we find no instance in which an adversary considered an NFU pledge credible in the absence of the political and military conditions identified in our theory, as illustrated in figure 2.

Furthermore, in almost all cases, adversaries assessed states' pledges as lacking credibility. In only one dyad (U.S. perceptions of China) did an adversary ever assess a state's NFU pledge as credible. This assessment emerged only because that state utterly lacked a first-use capability against the adversary (before 1982) and persisted only because political relations improved dramatically while emerging first-use nuclear capabilities remained extremely limited (after 1982). When capabilities and political relations changed, this trust rapidly evaporated (after about 2010). In the other cases, we find that hostile political relations combined with even latent first-use capabilities con-

Table 3. Evidence from Cases of Adversary Perceptions of No-First-Use (NFU) Pledges

Case	Political relations	Military posture	Adversary perception	Supports theory?
U.S. perceptions of the Soviet NFU pledge, 1977–1991	Hostile	Capable of first use	Not credible	Yes
U.S. perceptions of the Chinese NFU pledge, 1964–1982	Hostile	Incapable of first use	Credible	Yes
U.S. perceptions of the Chinese NFU pledge, 1982–2010	Benign	Barely capable of first use	Credible	Yes
U.S. perceptions of the Chinese NFU pledge, 2010–present	Hostile	Capable of first use	Not credible	Yes
Indian perceptions of the Chinese NFU pledge, 1964–present	Hostile	Capable of first use	Not credible	Yes
Pakistani perceptions of the Indian NFU pledge, 1999–present	Hostile	Capable of first use	Not credible	Yes

sistently soured adversary perceptions of states’ NFU pledges. The empirical results are summarized in table 3.

Adversary Perceptions of the Soviet Union’s NFU Pledge

The Soviet Union first promulgated a vague NFU pledge in the Russian city of Tula in 1977, where General Secretary Leonid Brezhnev denounced claims that the Soviets might use nuclear weapons first as “absurd and totally unfounded,” vowing that “our country will never embark on the road of aggression.”³⁷ In June 1982, Soviet Foreign Minister Andrei Gromyko delivered a clearer, more absolute statement at the United Nations, announcing, “The Soviet state solemnly declares the Union of Soviet Socialist Republics assumes an obligation not to be the first to use nuclear weapons.”³⁸ This promise was categorical and did not outline an exception for preemption in case of an impending attack.

Given the hostility of U.S.-Soviet relations during the Cold War, our theory

37. “Brezhnev Speech,” USSR National Affairs, Political, and Social Developments, January 18, 1977, CIA Records Search Tool (CREST), <https://www.cia.gov/readingroom/docs/CIA-RDP05S00365R000100020001-2.pdf>.

38. “Brezhnev’s Statement and Excerpts from Gromyko’s Speech,” *New York Times*, June 16, 1982, <https://www.nytimes.com/1982/06/16/world/brezhnev-s-statement-and-excerpts-from-gromyko-s-speech.html>.

predicts that the United States would be highly skeptical of the Soviet NFU pledge and instead would pay close attention to actual Soviet military capabilities for first use. This is, in fact, what we observe. Not only did the Soviets have the ability to use nuclear weapons first for purposes of coercive escalation, but Soviet investments in counterforce capabilities during this period led many in the United States to fear that Moscow might actually launch a damage-limiting first strike in a war with NATO. These concerns led the United States to dismiss the Soviet pledge. Thus, both the process and the outcome in this case support our argument.

U.S. PERCEPTIONS OF THE SOVIET UNION'S NFU PLEDGE, 1977-1991

First, regarding the political relationship, the United States and the Soviet Union were obviously hostile toward each other during the Cold War.³⁹ The two countries had been each other's primary geopolitical adversary for decades by the time the Soviets announced their NFU declaration. The prospect of a U.S.-Soviet war in Europe was the defining problem for both countries' militaries, and each invested significant national resources into preparing for such a conflict—as well as in seeking to undermine the other through diplomatic maneuvers, proxy wars, and alliances. In short, this is a clear case of two states falling into the hostile branch of the decision tree in our theory.

Second, given this hostile political relationship, the theory expects the United States not to accept the Soviet NFU pledge at face value but instead to evaluate Soviet military capabilities for nuclear first use. Our theory predicts that even a latent first-use capability will ignite adversary skepticism, and Soviet capabilities by the late 1970s were certainly well above that bar and had been for many years. The Soviets had tens of thousands of nuclear warheads capable of reaching the United States and its allies. Making matters worse, the Soviet Union was undertaking steps to improve its arsenal both quantitatively and qualitatively.

For example, the same year that Brezhnev announced the strengthened NFU policy, he also began overhauling the military to reverse Nikita Khrushchev's reduction of the armed forces.⁴⁰ Furthermore, as Eugene Rostow, director of the U.S. Arms Control and Disarmament Agency, noted in a 1981 speech:

39. Robert J. McMahon, *The Cold War: A Very Short Introduction*, 2nd ed. (Oxford: Oxford University Press, 2021).

40. Roger R. Reese, *The Soviet Military Experience: A History of the Soviet Army, 1917-1991* (London: Routledge, 1999), p. 9.

The emphasis in Soviet nuclear force planning is not only on retaliatory weapons but on superiority, on strategic counterforce capability, and on damage prevention or limitation. A clear example of this principle is the persistent deployment of heavy and accurate ICBMs [intercontinental ballistic missiles], capable of destroying most of our ICBMs (and bombers on the ground, and submarines in port) in a first strike, with enough left over to constitute a formidable deterrent to American retaliation.⁴¹

Similarly, according to a 1982 National Intelligence Estimate (NIE), the United States believed that the Soviets had “enough hard target-capable ICBM RVs . . . to attack all US missile silos and launch control centers in a well-executed first strike.”⁴² Moreover, the Soviet Union was on track to continue improving its first-strike capability against hardened targets through “continued deployment of ballistic missiles with increasingly better accuracy, significantly greater survivability including more warheads on SLBMs [submarine-launched ballistic missiles] and the deployment of mobile ICBMs.”⁴³ The United States also believed that the Soviet Union’s command and control system had improved such that it could employ intercontinental-range nuclear forces against the United States in an “initial, preemptive, or retaliatory strike.”⁴⁴ And the Central Intelligence Agency (CIA) continued to report through the 1980s that the Soviet Union was making “vigorous efforts” to “develop, improve, and deploy offensive and defensive weapons of virtually every type” in order to fight a strategic nuclear war.⁴⁵

Our theory predicts that these Soviet military capabilities, in the context of a hostile political relationship, would lead to deep U.S. skepticism of the Soviet NFU pledge—a prediction that evidence on U.S. perceptions supports. To be clear, the United States never saw Soviet nuclear first use as a high-probability event. In fact, declassified U.S. documents repeatedly emphasize that the Soviets were unlikely to launch a surprise first strike, even though they increasingly seemed to have the military capability to do so, given that the

41. Eugene V. Rostow, “United States Objectives in Arms Control Negotiations with the Soviet Union,” speech at the Council on Foreign Relations, New York, October 20, 1981, CREST, p. 10, <https://www.cia.gov/readingroom/docs/CIA-RDP83M00914R002100110084-9.pdf>.

42. Central Intelligence Agency (CIA), “Soviet Capabilities for Strategic Nuclear Conflict, 1981–91,” NIE 11-3/8-81, December 31, 1981, U.S. National Archives Catalog, p. 13, <https://catalog.archives.gov/id/7327151>.

43. *Ibid.*, p. 7.

44. Donald P. Steury, ed., *Intentions and Capabilities: Estimates on Soviet Strategic Forces, 1950–1983* (Washington, DC: Center for the Study of Intelligence, CIA, 1996), p. 415.

45. CIA, “Soviet Capabilities for Strategic Nuclear Conflict,” NIE 11-3/8-81, p. 7.

Soviet Union kept its large ICBM force at a high level of peacetime readiness.⁴⁶ Rather, the concern was that the Soviets might be driven to nuclear use during a conventional war, especially if they were losing or if they believed that the United States was attempting to launch its own nuclear first strike. As one 1986 NIE noted, "The likelihood of the Soviets' initiation of nuclear strikes would increase if they suffered a major strategic reversal on the battlefield. If they possessed convincing evidence that NATO or the United States was about to launch a large-scale nuclear strike, they would attempt to preempt."⁴⁷ A 1987 NIE concurred: "If they had convincing evidence of US intentions to launch its strategic forces (in, for example, an ongoing theater war in Europe) the Soviets would attempt to preempt."⁴⁸

Interestingly, none of these assessments suggested that the Soviet NFU pledge would have anything to do with the likelihood of Soviet first use; the United States believed that, in extremis, such an unpleasant decision would be a function of Soviet beliefs about whether going first would either limit damage if nuclear war had become inevitable or enable it to coerce NATO if the Warsaw Pact were losing a conventional war. Assessments of these questions do not even mention Soviet declaratory policy.

Moreover, U.S. judgments on this subject from the mid-to-late-1980s are virtually the same as those that appeared in U.S. intelligence assessments in 1981, before the Soviet announcement of a strict NFU pledge. For example, an NIE from that year acknowledged that a Soviet bolt from the blue was unlikely and recognized that, in general, "the Soviets would prefer to achieve their objectives without using nuclear weapons."⁴⁹ Yet much like the assessments from later in the decade, the document also assessed that the Soviets expected that a theater nuclear war could possibly begin with pressure on the Warsaw Pact "to use nuclear weapons to halt a NATO breakthrough." In such a scenario, the estimate warned, "the Soviets would use, in addition to tactical nuclear weapons, hundreds of peripheral and some intercontinental-range missiles and

46. Director of Central Intelligence, "Soviet Strategic Nuclear Attack Options: Selected Issues for Warning and Policy," September 1989, CREST, pp. 1–2, <https://www.cia.gov/readingroom/docs/CIA-RDP00B00369R000100170001-4.pdf>; CIA, "Soviet Forces and Capabilities for Strategic Nuclear Conflict through the Mid-1990s: Key Judgements and Executive Summary," NIE 11-3/8-86/S, April 24, 1986, CREST, p. 15, <https://www.cia.gov/readingroom/docs/CIA-RDP90T00155R000400070002-1.pdf>; CIA, "Soviet Forces and Capabilities for Strategic Nuclear Conflict through the Late 1990s," NIE 11-3/8-87, July 1987, CREST, p. 9, <https://www.cia.gov/readingroom/docs/CIA-RDP09T00367R000200280001-6.pdf>.

47. CIA, "Soviet Forces and Capabilities," NIE 11-3/8-86/S, p. 3.

48. CIA, "Soviet Forces and Capabilities," NIE 11-3/8-87, pp. 9–10.

49. CIA, "Soviet Capabilities for Strategic Nuclear Conflict," NIE 11-3/8-81, pp. 9–10.

aircraft against NATO's forward-based nuclear forces," as well as against potential targets in Asia and at sea.⁵⁰ The continuity in assessments from before Gromyko's speech and after it is striking and suggests how little impact the pledge had on U.S. perceptions.

Beyond these private assessments, the United States also publicly expressed doubts about the pledge's credibility given the growth in Soviet capabilities, reinforcing the relevance of the factors emphasized in our theory. In 1982, for example, State Department spokesperson Dean Fischer dismissed Soviet NFU as an "unverifiable and unenforceable" pledge that "gives no assurance that an aggressor would not in fact resort to the first use of nuclear weapons during a conflict or crisis."⁵¹ U.S. Secretary of Defense Caspar Weinberger wrote in an op-ed, "Whatever [the Soviets] claim their intentions to be, the fact remains that they are designing their weapons in such a way and in sufficient numbers to indicate to us that they think they could begin, and win, a nuclear war."⁵² Similarly, Rostow argued in a public address that "the purpose of Soviet nuclear weapons is . . . intimidation and coercion—and, if necessary, the capability to initiate and win a nuclear war. This is clear in what Soviet writers on strategy say, and it is even more obvious in what the Soviet Union has done and is doing."⁵³ In his view, "We would have no way of being confident that the Soviet Union would in fact fight only with conventional weapons" when push came to shove.⁵⁴ These sentiments were shared by U.S. allies as well. British Prime Minister Margaret Thatcher stated that "such [NFU] promises can never be dependable amid the stresses of war,"⁵⁵ and a top defense policy-maker from the United Kingdom later reflected that no state would "let its options be narrowed by a past declaration."⁵⁶

50. *Ibid.*, p. 10.

51. "U.S. Says Soviet Pledge on Nuclear War Is Empty," *New York Times*, June 17, 1982, <https://www.nytimes.com/1982/06/17/world/us-says-soviet-pledge-on-nuclear-war-is-empty.html>.

52. Caspar W. Weinberger, "Weinberger View on Nuclear War," Letters to the Times, *Los Angeles Times*, n.d., CREST, p. 1, <https://www.cia.gov/readingroom/docs/CIA-RDP84B00274R000300110006-2.pdf>. Document is undated, but we confirmed it is from August 25, 1982, based in part on context provided by George C. Wilson, "Weinberger Lobbies Editors on War Policy," *Washington Post*, August 25, 1982, https://www.washingtonpost.com/archive/politics/1982/08/25/weinberger-lobbies-editors-on-war-policy/87174334-8263-4e81-bcd6-33d3d1a34a15/?itid=sr_1.

53. Rostow, "United States Objectives in Arms," p. 11.

54. Eugene V. Rostow, "The Great Nuclear Debate," speech at the Annual Meeting of the American Institute of Astronautics and Aeronautics, Baltimore, MD, May 25, 1982, CREST, p. 18, <https://www.cia.gov/readingroom/docs/CIA-RDP84B00049R001800210036-6.pdf>.

55. "Excerpts from the Thatcher Address," *New York Times*, June 24, 1982, <https://www.nytimes.com/1982/06/24/world/excerpts-from-the-thatcher-address.html>.

56. Michael Quinlan, "British Nuclear Weapons Policy: Past, Present, and Future," in John C.

Besides these statements, U.S. behavior also reflected the United States' skepticism about the Soviet NFU pledge. Most obviously, the United States made increasingly costly investments to hedge against a Soviet first strike during this period.⁵⁷ The Single Integrated Operational Plan included U.S. "retaliatory strikes that will be effective, *even if the Soviets attack first*, without warning, and in a manner designed to reduce our capabilities as much as possible (emphasis added)," implying that the authors thought that Soviet NFU would not restrain a counterforce first strike.⁵⁸ U.S. skepticism also manifested itself in the Ronald Reagan administration's \$4.2 billion civil defense buildup in 1982, which sought to protect the U.S. population from a sudden Soviet attack.⁵⁹ These actions are hard to explain if the United States believed that the Soviet pledge was credible.

To sum up, Soviet declaratory policy made ever stronger assurances against the possibility of first use during the late 1970s and early 1980s. But such assurances did little to shift U.S. perceptions given Cold War political hostility and the military balance. We found no source indicating that the U.S. government ever believed that the Soviet NFU would prevent a nuclear first strike on the United States (though again, the United States did not consider this a particularly likely event even before the Soviet declaration). In fact, declassified U.S. documents from this era contain scant references to Soviet declaratory policy at all. Instead, assessments of the prospect of being subject to Soviet first use overwhelmingly focus on the second factor emphasized in our theory: actual Soviet nuclear capabilities.⁶⁰ The case demonstrates that even categorical NFU pledges will not be perceived as credible by adversaries when political relations are hostile and the pledging state retains the ability to strike first in extremis.

Hopkins and Weixing Hu, eds., *Strategic Views from the Second Tier: The Nuclear Weapons Policies of France, Britain, and China* (New Brunswick, NJ: Transaction, 1994), p. 136.

57. Benjamin B. Fischer, "The Soviet-American War Scare of the 1980s," *International Journal of Intelligence and Counterintelligence*, Vol. 19, No. 3 (2006), pp. 480–518, <https://doi.org/10.1080/08850600600656400>.

58. William E. Odom, "Nuclear Weapons Employment Policy," Presidential Directive/NSC-59, White House, August 5, 1980, National Security Archive, p. 2, <https://nsarchive2.gwu.edu/nukevault/ebb390/docs/7-25-80%20PD%2059.pdf>.

59. "Dig a Hole: Reagan Administration and Civil Defense," *Time*, March 29, 1982, <http://content.time.com/time/subscriber/article/0,33009,953410,00.html>.

60. CIA, "Soviet Forces and Capabilities," NIE 11-3/8-87, pp. 1–14; CIA, "Soviet Capabilities for Strategic Nuclear Conflict, 1982–92: National Intelligence Estimate: The Key Judgements," NIE 113/8-82, February 15, 1983, CREST, pp. 1–19, <https://www.cia.gov/readingroom/docs/CIA-RDP85T00176R000300070001-6.pdf>; CIA, "Soviet Forces and Capabilities," NIE 11-3/8-86/S, pp. 1–23; Director of Central Intelligence, "Soviet Strategic Nuclear Attack Options," pp. 1–6.

Adversary Perceptions of China's NFU Pledge

China has maintained an NFU policy since it first tested nuclear weapons in 1964, when the regime committed to “never use nuclear weapons first at any time nor under any circumstances.”⁶¹ Senior leaders and official publications have repeatedly reaffirmed this promise as a cornerstone of China’s declaratory policy.⁶² Despite this consistency, however, adversary perceptions of China’s policy have varied both cross-nationally and over time in ways consistent with the predictions of our theory. Specifically, we find that the United States rated China’s pledge as credible from 1964 until about 2010 (although the reasons differed over time), when both the political and military variables identified in our theory began to change, souring U.S. perceptions of the credibility of China’s declaratory policy. By contrast, India has never considered China’s NFU pledge credible. Bilateral relations have been consistently hostile, and the two countries’ geographic proximity has enabled China’s nuclear arsenal to threaten India almost from its inception.

U.S. PERCEPTIONS OF CHINA’S NFU PLEDGE, 1964–PRESENT

U.S.-China political relations have gone through three major periods since 1964. In the first period (1964–1982), relations were hostile because of China’s communist leadership and perceived alignment with the Soviets, though tensions began to recede in the 1970s with the Richard Nixon administration’s improvement of relations.⁶³ Our theory predicts that the United States would consider China’s pledge credible in this period only if China’s nuclear first-use capabilities were extremely minimal—which, in fact, they were.

A detailed 1971 U.S. analysis of China’s nuclear forces repeatedly observed that China lacked weapons that could even reach the continental United States.⁶⁴ As a result, the estimate viewed China’s NFU as credible, concluding, “The only thing the Chinese have said about their nuclear doctrine is that they

61. Chambers et al., *No-First Use of Nuclear Weapons*, p. 7; Tong Zhao, “China and the International Debate on No First Use of Nuclear Weapons,” *Asian Security*, Vol. 18, No. 3 (2022), pp. 205–213, <https://doi.org/10.1080/14799855.2021.2015654>.

62. Chambers et al., *No-First Use of Nuclear Weapons*, p. 6.

63. James Mann, *About Face: A History of America’s Curious Relationship with China, from Nixon to Clinton* (New York: Alfred A. Knopf, 1999).

64. CIA, “China’s Security Policy: Political Implications of Growing Capabilities for Nuclear Conflict,” SNIE 13-4-83, July 26, 1983, CREST, pp. 1–25, <https://www.cia.gov/readingroom/docs/CIA-RDP86T00302R000701240003-8.pdf>.

have a firm no-first-use policy. In the light of the overwhelming nuclear superiority of the US and USSR, this is probably a realistic statement of intent. . . . Initiating a nuclear attack on the US or the USSR would invite the elimination of China as an industrial and military power.”⁶⁵ This close attention to the military balance in a hostile political relationship is consistent with what our theory would predict; China’s utter lack of capabilities enabled the United States to trust China’s pledge despite the two countries’ poor political relations.

In the second period (1982–2010), U.S.-China relations became more friendly after normalization, putting the two on the benign rather than the hostile branch of the decision tree in our theory. The two countries were not allies, and major differences remained over Taiwan. But declassified intelligence assessments show that the United States understood Beijing to be “leaning” or “tilting” toward Washington as a way to counter Soviet power and secure economic development.⁶⁶ Integral to this approach, in the U.S. view, was a Chinese desire to avoid armed conflict with the superpowers.⁶⁷ This assumption continued in assessments well into the 1990s, including a 1998 NIE premised on “no major military conflict” with China and a 1999 NIE rating the chance of war over Taiwan as “very low.”⁶⁸

Our theory expects that the United States would continue to rate the likelihood of being subject to Chinese nuclear first use in this second period as very low simply because of the very low likelihood of war in general. The evidence again bears out this prediction, while also showing that the United States continued to keep an eye on military factors. For example, declassified U.S. intelligence assessments from the 1980s repeatedly characterized China’s nuclear capabilities as retaliatory, mostly oriented toward the Soviets, and postured for second strike.⁶⁹ An estimate from the early 1980s emphasized that China’s

65. CIA, “Communist China’s Weapons Program for Strategic Attack: National Intelligence Estimate,” NIE 13-8-71, October 28, 1971, p. 35, https://www.cia.gov/readingroom/docs/DOC_0001098170.pdf.

66. Directorate of Intelligence, “China: Foreign Policy Shift in Perspective,” EA 83-10151, Office of East Asian Analysis, September 1983, CREST, pp. 1–12, <https://www.cia.gov/readingroom/docs/CIA-RDP84S00928R000100030002-8.pdf>; Directorate of Intelligence, “China: Managing the Soviet Threat,” EA 83-10228, Office of East Asian Analysis, November 1983, pp. v, 7–8, CREST, <https://www.cia.gov/readingroom/docs/CIA-RDP84S00928R000100150003-4.pdf>; CIA, “China’s Security Policy,” p. 1.

67. CIA, “China’s Security Policy,” p. 7.

68. CIA, “Russian-Chinese Relations: Prospects and Implications,” NIE 98-08, August 1998, CREST, p. 2, https://www.cia.gov/readingroom/docs/DOC_0005526244.pdf; CIA, “China-Taiwan: Prospects for Cross-Strait Relations,” NIE 99-13, September 1999, CREST, p. 3, https://www.cia.gov/readingroom/docs/DOC_0005526243.pdf.

69. CIA, “China’s Security Policy,” pp. 1–6.

“very small and backward” arsenal would “force reliance on a minimum retaliatory strategy.”⁷⁰ It predicted that Chinese leaders “will continue to declare that they will not be the first to use nuclear weapons.”⁷¹ An estimate from the late 1980s similarly noted, “China’s nuclear strategy is defensive in nature. It is a strategy of minimal deterrence” focused on retaliation.⁷² Indeed, as Taylor Fravel and Evan Medeiros observe, “A decade after exploding its first nuclear device, China likely possessed only 75 nuclear warheads and tens of gravity bombs. . . . China did not possess its first ICBM capable of striking either Moscow or Washington, the DF-5, until the early 1980s. By the early 1990s, China reportedly possessed only four DF-5s. Even then, China’s ICBM force grew only to twenty missiles by the mid-to-late 1990s.”⁷³

More generally, the absence of evidence of U.S. worries about Chinese first use is indeed evidence of absence. The lack of public U.S. commentary on China’s NFU pledge or Chinese nuclear weapons in general in this period is striking, and it stands in contrast to the contemporaneous public treatment of the Soviet NFU pledge and arsenal. As one study notes, China and the United States did not even engage in nuclear dialogue before the 2000s because “the nuclear factor had not become a central concern for the United States, nor a major issue in bilateral interactions, given the huge asymmetry between the Chinese and American nuclear arsenals.”⁷⁴ The United States also never acknowledged mutual vulnerability with China as it did with the Soviet Union, did not pursue arms control, and rarely referenced the Chinese arsenal in official strategy documents before the 2000s. These choices all offer implicit confirmation that the United States was not worried about Chinese nuclear first use and that, in its view, the Chinese pledge and the Soviet pledge were quite different.

In the third period (2010–present), U.S.-China political relations grew significantly more adversarial, moving back to the hostile branch in our decision tree. Our theory would expect this development to lead the United States to re-

70. *Ibid.*, p. 15.

71. *Ibid.*, p. 19.

72. “Chinese Strategic Forces,” Defense Intelligence Agency, ca. 1987, FOIA Electronic Reading Room, p. 1, <https://www.dia.mil/FOIA/FOIA-Electronic-Reading-Room/FileId/162059/>.

73. M. Taylor Fravel and Evan S. Medeiros, “China’s Search for Assured Retaliation: The Evolution of Chinese Nuclear Strategy and Force Structure,” *International Security*, Vol. 35, No. 2 (Fall 2010), p. 57, https://doi.org/10.1162/ISEC_a_00016.

74. Yao Yunzhu, “Taking Stock: The Past, Present, and Future of Nuclear Dialogue,” in Brad Roberts, ed., *Taking Stock: U.S.-China Track 1.5 Nuclear Dialogue* (Livermore, CA: Center for Global Security Research, Lawrence Livermore National Laboratory, 2020), p. 8.

new its attention to China's military capabilities for first use, potentially downgrading the credibility of China's NFU pledge. Again, the evidence supports this prediction: worsening political relations combined with improving Chinese first-use capabilities led the United States to dramatically revise its assessment of China's NFU pledge, deeming it not credible.

First, in terms of the political relationship, the United States began to characterize China's behavior around 2010 as "newly assertive." This characterization was based on developments such as China's stance at the Copenhagen climate conference in 2009 and its response to arms sales to Taiwan and the Dalai Lama's visit in 2010. Also in 2010, China apparently expanded its claims in the South China Sea, diplomatically defended North Korea, and strongly reacted to Japan's arrest and detention of a Chinese trawler captain.⁷⁵ Against this backdrop, the United States began refocusing its defense strategy more intently on the Asia Pacific.⁷⁶ This reorientation became known as the 2011 "pivot to Asia" and later the "re-balance," reflecting heightened concern about the growth of Chinese power.⁷⁷ Relations have since further deteriorated, with the Donald Trump administration explicitly emphasizing a more competitive long-term relationship and the Biden administration continuing this approach.⁷⁸ As Robert Blackwill and Philip Zelikow concluded in a 2021 report, "U.S.-China relations are bad, at a historic low point in the past half century, and are unlikely to fundamentally improve."⁷⁹ Many observers believe that the two countries now face a serious prospect of war over Taiwan.⁸⁰

Second, these deteriorating political relations led the United States to pay

75. Alastair Iain Johnston, "How New and Assertive Is China's New Assertiveness?," *International Security*, Vol. 37, No. 4 (Spring 2013), p. 11, https://doi.org/10.1162/ISEC_a_00115.

76. David Nakamura and William Wan, "Obama Heads to Asia with Sharp Focus on China's Growing Power," *Washington Post*, November 11, 2011, https://www.washingtonpost.com/world/asia_pacific/obama-heads-to-asia-with-sharp-focus-on-chinas-growing-power/2011/11/10/gIQA0sQkBN_story.html.

77. Nina Silove, "The Pivot before the Pivot: U.S. Strategy to Preserve the Power Balance in Asia," *International Security*, Vol. 40, No. 4 (Spring 2016), p. 45, https://doi.org/10.1162/ISEC_a_00238.

78. *Summary of the 2018 National Defense Strategy* (Arlington, VA: U.S. Department of Defense, 2018), pp. 1–14; Jeffrey A. Bader, "Biden's China Policy Needs to Be More Than Just Trump Lite," *Order from Chaos* (blog), Brookings Institution, January 25, 2022, <https://www.brookings.edu/articles/bidens-china-policy-needs-to-be-more-than-just-trump-lite/>.

79. Robert D. Blackwill and Philip Zelikow, *The United States, China, and Taiwan: A Strategy to Prevent War*, Council Special Report 90 (New York: Council on Foreign Relations, 2021), p. 12.

80. *Ibid.*, p. 1; Chris Buckley and Amy Qin, "In Surge of Military Flights, China Tests and Warns Taiwan," *New York Times*, October 14, 2021, <https://www.nytimes.com/2021/10/03/world/asia/china-taiwan-flights-airspace.html>; Christian Shepherd and Vic Chiang, "How Chinese Aggression Is Increasing the Risk of War in the Taiwan Strait," *Washington Post*, November 13, 2023, <https://www.washingtonpost.com/world/2023/11/13/china-biden-xi-meeting-apec-taiwan/>.

much more attention to China's improving nuclear capabilities, which our theory predicts should have resulted in a decline in U.S. perceptions of the credibility of China's NFU pledge. Indeed, even though U.S. and Russian arsenals dwarf China's, China's force has grown and appears on track to further expand. Moreover, China's nuclear forces have become qualitatively more capable, with improved range and accuracy. China has also diversified its platforms to include a nascent sea-based nuclear leg and, possibly, efforts to deploy a nuclear air-launched ballistic missile.⁸¹ In addition, China's expanding inventory of the intermediate-range DF-26 missile has raised concerns that China may be developing a theater nuclear warfighting capability that could be suited to first use. The DF-26 is dual-capable, with an apparent "hot swapping" capability—that is, the ability to rapidly switch between loading conventional and nuclear warheads. It is also believed to be highly accurate and well suited to attacking military targets in the Pacific.⁸² The DF-26 missile therefore looks quite different from China's previous nuclear weapons, which seemed limited to conducting delayed second-strike retaliation against cities.⁸³

Finally, China's nuclear forces may not be as recessed as they once were. Some seem to be alerted on a regular basis, meaning that they are much more ready to be launched than the de-mated missiles of the past.⁸⁴ As Austin Long notes, "Some portion, possibly a substantial portion, of Chinese nuclear forces may have warheads that are mated routinely."⁸⁵ Meanwhile, China's most advanced, road-mobile ICBMs are now solid fueled, meaning that the long preparation times once needed for liquid fueling no longer apply.⁸⁶ China's pursuit

81. Office of the Secretary of Defense, *Military and Security Developments Involving the People's Republic of China 2023*, Annual Report to Congress (Arlington, VA: Department of Defense, 2023), chap. 8, pp. 55, 66–69, 103–110, <https://media.defense.gov/2023/Oct/19/2003323409/-1/-1/1/2023-MILITARY-AND-SECURITY-DEVELOPMENTS-INVOLVING-THE-PEOPLES-REPUBLIC-OF-CHINA.PDF>.

82. Austin Long, "Myths or Moving Targets? Continuity and Change in China's Nuclear Forces," *War on the Rocks*, December 4, 2020, <http://warontherocks.com/2020/12/myths-or-moving-targets-continuity-and-change-in-chinas-nuclear-forces/>; Caitlin Talmadge, "The U.S.-China Nuclear Relationship: Growing Escalation Risks and Implications for the Future," testimony before the U.S.-China Economic and Security Review Commission, Washington, DC, June 7, 2021, https://www.uscc.gov/sites/default/files/2021-06/Caitlin_Talmadge_Testimony.pdf.

83. Abraham Denmark and Caitlin Talmadge, "Why China Wants More and Better Nukes: How Beijing's Nuclear Buildup Threatens Stability," *Foreign Affairs*, November 19, 2021, <https://www.foreignaffairs.com/china/why-china-wants-more-and-better-nukes>.

84. Office of the Secretary of Defense, *Military and Security Developments Involving the People's Republic of China 2023*, p. 106.

85. Long, "Myths or Moving Targets?"

86. Hans M. Kristensen and Matt Korda, "Chinese Nuclear Forces, 2020," *Bulletin of the Atomic Scientists*, Vol. 76, No. 6 (2020), p. 173, <https://doi.org/10.1080/00963402.2020.1846432>.

of a sea-based nuclear force also suggests that, if it has not already, it may at some point send armed nuclear-powered ballistic missile submarines (SSBNs) to sea, which would of course need to have warheads mated to SLBMs in order to be a viable part of China's deterrent.⁸⁷ All these changes suggest a greater Chinese military capability to engage in first nuclear use, or at least to launch on warning.

These changes in China's nuclear forces have sharply increased U.S. skepticism regarding Beijing's NFU pledge, consistent with our theory's predictions.⁸⁸ For example, the 2018 *Nuclear Posture Review* argued that the United States needed to be able to deter Chinese nuclear escalation, which implies that the United States believed that Chinese nuclear first use was a possibility. As the document stated, "Our tailored strategy for China is designed to prevent Beijing from mistakenly concluding that it could secure an advantage through the limited use of its theater nuclear capabilities or that any use of nuclear weapons, however limited, is acceptable."⁸⁹ This sort of statement is hard to square with a U.S. belief in China's NFU pledge.

In 2020, the Pentagon's annual report on Chinese military power also indicated U.S. concern that China's commitment to NFU might be waning. First, the report suggested that China may intend to move to a launch-on-warning posture.⁹⁰ The report further stated:

There is some ambiguity . . . in the narrative in China over the conditions under which China's NFU policy would no longer apply. Some PLA [People's Liberation Army] officers have written publicly of the need to spell out conditions under which China might need to use nuclear weapons first. . . . There

87. Office of the Secretary of Defense, *Military and Security Developments Involving the People's Republic of China 2023*, p. 59; Greg Torode and Eduardo Baptista, "China's Intensifying Nuclear-Armed Submarine Patrols Add Complexity for U.S., Allies," Reuters, April 2, 2023, <https://www.reuters.com/world/chinas-intensifying-nuclear-armed-submarine-patrols-add-complexity-us-allies-2023-04-04/>.

88. Caitlin Talmadge and Joshua Rovner, "The Meaning of China's Nuclear Modernization," *Journal of Strategic Studies*, Vol. 46, No. 6–7 (2023), pp. 1–33, <https://doi.org/10.1080/01402390.2023.2212871>; Zhao, "China and the International Debate."

89. Office of the Secretary of Defense, *2018 Nuclear Posture Review* (Arlington, VA: Department of Defense, 2018), p. 32, <https://media.defense.gov/2018/Feb/02/2001872886/-1/-1/1/2018-NUCLEAR-POSTURE-REVIEW-FINAL-REPORT.PDF>.

90. Office of the Secretary of Defense, *Military and Security Developments Involving the People's Republic of China 2020*, Annual Report to Congress (Arlington, VA: Department of Defense, 2020), p. 85, <https://media.defense.gov/2020/Sep/01/2002488689/-1/-1/1/2020-DOD-CHINA-MILITARY-POWER-REPORT-FINAL.PDF>. This language was repeated almost verbatim in the 2021 report as well. Office of the Secretary of Defense, *Military and Security Developments Involving the People's Republic of China* (Arlington, VA: Department of Defense, 2020), p. 90.

has been no indication that national leaders are willing to attach such nuances and caveats *publicly* to China's existing NFU policy as affirmed by recent statements by the PRC [People's Republic of China] Foreign Ministry. China's lack of transparency regarding the scope and scale of its nuclear modernization program, however, raises questions regarding its future intent as it fields larger, more capable nuclear forces (emphasis added).⁹¹

In addition, as Long points out, the use of the modifier "publicly" is important in this statement: "It suggests that change is possible in the policy absent a change in China's declaratory policy."⁹² The 2023 report even more baldly states that the United States believes there are major exceptions to China's NFU policy:

Despite this policy, China's nuclear strategy probably includes consideration of a nuclear strike in response to a nonnuclear attack threatening the viability of China's nuclear forces or C2 [command and control], or that approximates the strategic effects of a nuclear strike. Beijing probably would also consider nuclear use to restore deterrence if a conventional military defeat in Taiwan gravely threatened CCP [Chinese Communist Party] regime survival.⁹³

Beyond these formal policy documents, senior U.S. officials and military leaders have publicly aired doubts about the credibility of China's NFU pledge. In spring 2020, for example, Adm. Charles Richard, then commander of U.S. Strategic Command (which has responsibility for U.S. nuclear weapons) stated in Senate testimony about China's NFU pledge, "I think I could drive a truck through that no first use policy."⁹⁴ Similarly, in fall 2020, he publicly commented, "China . . . is developing a stack of capabilities that, to my mind, is increasingly inconsistent with a stated no-first-use policy."⁹⁵ Around the same time, Robert Soofer, deputy assistant secretary of defense for nuclear and missile defense policy, publicly stated, "I don't believe China when they say they have a no-first-use policy. . . . In extremis, if they have to use nuclear

91. Office of the Secretary of Defense, *Military and Security Developments Involving the People's Republic of China 2020*, p. 86.

92. Long, "Myths or Moving Targets?"

93. Office of the Secretary of Defense, *Military and Security Developments Involving the People's Republic of China 2023*, pp. 105–106.

94. "U.S. Strategic Command and U.S. Northern Command SASC Testimony," U.S. Strategic Command, February 13, 2020, <https://www.stratcom.mil/Media/Speeches/Article/2086752/us-strategic-command-and-us-northern-command-sasc-testimony/>.

95. "Adm. Richard Discusses USSTRATCOM Operations with Reporters," transcript, U.S. Department of Defense, September 14, 2020, <https://www.defense.gov/News/Transcripts/Transcript/Article/2347223/adm-richard-discusses-usstratcom-operations-with-reporters/>.

weapons, they will use nuclear weapons first. I think that pledge is only as good as . . . the piece of paper that it's written on."⁹⁶

Overall, the record shows that despite the constancy of China's declaratory policy, U.S. perceptions of China's NFU pledge have varied considerably over time as the political and military conditions in our theory have also varied. Furthermore, the nature of that variation reinforces that the bar to pledge credibility is high, requiring either benign political conditions (1982–2010) or a minimal nuclear posture by the pledging state (1964–1982). When those conditions started to shift, U.S. perceptions of the credibility of China's NFU pledge changed dramatically, as our theory expects.

INDIA'S PERCEPTIONS OF CHINA'S NFU PLEDGE, 1964–PRESENT

Information on Indian policymakers' perceptions of China's NFU pledge is more limited but nevertheless confirms our theory's emphasis on the primacy of political relations and military capability in shaping adversary perceptions of NFU pledge credibility. First, regarding politics, India and China have long had a hostile relationship; China's defeat of India in the 1962 border war was a major impetus for India's own pursuit of nuclear weapons.⁹⁷ In the intervening years the two countries have clashed during a series of border disputes, culminating most recently in major skirmishes in 2020–2021 that resulted in casualties on both sides. China's close relationship with India's main rival, Pakistan, has also long strained interactions between Delhi and Beijing.

Our theory predicts that given this hostile political relationship, India would view even latent Chinese nuclear capabilities for first use as a reason for skepticism of China's NFU pledge, which in fact is what we observe. Importantly, India's proximity to China means that China's nuclear arsenal has had to clear a much lower bar in order to pose a first-use threat to India than to the United States. China did not need to develop ICBMs to threaten Indian cities; it could attack with gravity bombs delivered by aircraft or with short-range missiles. Indeed, China's arsenal has posed a nuclear threat to India almost from its inception.

96. Robert Soofer and Doug Birkey, "DASD for Nuclear and Missile Defense Policy Delivers Remarks at the Mitchell Institute Nuclear Deterrence Forum Series," transcript, U.S. Department of Defense, September 2, 2020, <https://www.defense.gov/News/Transcripts/Transcript/Article/2337753/dasd-for-nuclear-and-missile-defense-policy-delivers-remarks-at-the-mitchell-in/>.

97. Gaurav Kampani, *China-India Nuclear Rivalry in the "Second Nuclear Age"* (Oslo, Norway: Institutt for forsvarsstudier, 2014), p. 11, <https://www.jstor.org/stable/resrep25810.1>.

Making matters worse, for decades India was functionally unable to target Chinese nuclear forces if attacked with nuclear weapons, given China's massive strategic depth.⁹⁸ Even now that India has its own arsenal, it remains at a disadvantage. As Ashley Tellis noted even before Chinese nuclear modernization had much momentum, "China's nuclear deterrent is orders of magnitude more capable than India's because of the greater numbers of weapons and delivery systems deployed, the huge difference in the yield of the largest warheads deployed, the significant disparity in the survivability of Chinese and Indian nuclear forces, and the superior quality of Chinese missilery in comparison with its Indian counterpart."⁹⁹

Given this military threat in the context of a hostile political relationship, our theory would expect India to dismiss China's NFU pledge as not credible. In fact, Indian perceptions conform to these predictions. The sources and studies we examined demonstrate that India has always been and remains skeptical of China's NFU pledge—a notable contrast to variations in U.S. perceptions of China's NFU over time. As one study notes, "Though China's nuclear doctrine is reassuring to most countries, Indian officials question China's reticence to use nuclear weapons against India specifically. . . . Some see it as only a matter of time before a nuclear China with increased capabilities and increasing regional and global ambitions 'turns its gaze' on India."¹⁰⁰ Indeed, in a study involving dozens of interviews of Indian military, political, technical, and academic experts, Lora Saalman concludes that "for India, China may be more of a source of strategic ambiguity than Pakistan" and that there are doubts about whether China's NFU pledge would hold up over time or under stress.¹⁰¹

Tellingly, India has long sought for China to tailor its NFU pledge such that it renounces nuclear use against India, which China has always declined to do.¹⁰² India may have sought this assurance because "a 1995 version of the

98. *Ibid.*, pp. 17–20.

99. Ashley J. Tellis, "No Escape: Managing the Enduring Reality of Nuclear Weapons," in Ashley J. Tellis, Abraham M. Denmark, and Travis Tanner, eds., *Asia in the Second Nuclear Age* (Washington, DC: National Bureau of Asian Research, 2013), p. 19, https://carnegieendowment.org/files/SA13_Tellis.pdf.

100. Susan Turner Haynes, "Acrimony, Asymmetry, and the Sino-Indian Nuclear Relationship," *Nonproliferation Review*, Vol. 26, No. 5–6 (2019), pp. 427–447, <https://doi.org/10.1080/10736700.2020.1720229>.

101. Lora Saalman, "India's No-First-Use Dilemma: Strategic Consistency or Ambiguity towards China and Pakistan," *WritePeace* (blog), Stockholm International Peace Research Institute, December 2, 2020, <https://sipri.org/commentary/blog/2020/indias-no-first-use-dilemma-strategic-consistency-or-ambiguity-towards-china-and-pakistan>.

102. Kumar Sundaram and M. V. Ramana, "India and the Policy of No First Use of Nuclear

PRC NFU pledge is considered applicable only to NPT signatories and member states of Nuclear Weapons Free Zones (NWFZ). India falls in neither.”¹⁰³ That India has felt compelled to seek such assurances—decades after China adopted what seems like a categorical NFU stance—suggests that it doubts the credibility of China’s declaratory policy (though whether such assurances would actually resolve these doubts is an open question).

Indeed, as one study notes, there is anxiety in India because China’s pledge “has little to say about nuclear weapons used on its territories, especially those claimed by China such as Arunachal Pradesh and other areas on the contentious Sino-Indian boundary. China has been silent on using nuclear weapons on its own soil.”¹⁰⁴ Similarly, another concludes, “The consensus in India is that the immediate nuclear threat to India emanates from Pakistan. India’s military and its national security managers, however, view the longer-term threat from China. India’s national security managers also express the fear that a border conflict could involve nuclear blackmail.”¹⁰⁵ Another study also claims, “Questions linger in India as to whether China might have the intention of using its superior and more flexible nuclear capability in a revisionist or coercive fashion to manage the disputed border issue.”¹⁰⁶

Furthermore, India’s justification for its own overt nuclearization reflects deep implicit skepticism about China’s pledge.¹⁰⁷ As Prime Minister Atal Bihari Vajpayee noted in a letter to President Bill Clinton explaining India’s nuclear tests in 1998, “I have been deeply concerned at the deteriorating security environment, specially the nuclear environment, faced by India for some years past. We have an overt nuclear weapon state on our borders, a state which committed armed aggression against India in 1962. Although our relations with that country have improved in the last decade or so, an atmosphere of distrust persists mainly due to the unresolved border problem.”¹⁰⁸ This explanation makes no sense if India considered China’s NFU pledge to be credi-

Weapons,” *Journal for Peace and Nuclear Disarmament*, Vol. 1, No. 1 (2018), p. 164, <https://doi.org/10.1080/25751654.2018.1438737>; George Perkovich, *India’s Nuclear Bomb*, rev. ed. (Berkeley: University of California Press, 2002), p. 357.

103. Kartik Bommakanti and Suyash Desai, *China’s Nuclear Ambiguity and Its Implications for India*, ORF Occasional Paper 301 (New Delhi, India: Observer Research Foundation, 2021), pp. 3–47, https://www.orfonline.org/wp-content/uploads/2021/04/ORF_OccasionalPaper_309_ChinaAmbiguity.pdf.

104. *Ibid.*

105. Kampani, *China-India Nuclear Rivalry*, 11.

106. C. Uday Bhaskar and Nie Hongyi, “Comparing Nuclear Pledges and Practice,” in Lora Saalman, ed., trans., *The China-India Nuclear Crossroads* (Washington, DC: Carnegie Endowment for International Peace, 2012), p. 37.

107. We owe this insight to Christopher Clary.

108. Atal B. Vajpayee, “Nuclear Anxiety; Indian’s Letter to Clinton on the Nuclear Testing,” *New*

ble. Instead, it points to the primacy of exactly the political and military factors that our theory emphasizes as critical to adversary perceptions.

India's long-standing fears have only intensified with China's nuclear modernization efforts, which have led some in India to wonder if "China may be in the process of reviewing and ultimately changing its nuclear doctrine."¹⁰⁹ There is also concern in India that China could use its growing missile defenses to mop up any ragged retaliation after a first strike against India.¹¹⁰ In addition, "despite the NFU pledge, India is naturally concerned about Chinese strides in technologies like the DF-17, a hypersonic glide vehicle platform designed to render missile defence redundant, among others."¹¹¹ As Ankit Panda concludes, "Few Indian strategists take China's decades-long 'no first-use' posture at face value."¹¹²

To sum up, India's skepticism regarding China's NFU pledge is consistent with our theory's general expectation that it is difficult to meet the political and military conditions required for pledge credibility. Furthermore, the reasoning driving India's skepticism fits with the process predicted by our theory: hostile political relations have led India to doubt China's intentions, and China's military ability to engage in nuclear first use against India in extremis has dominated India's perceptions, regardless of China's declaratory policy consistently forswearing first use.

Adversary Perceptions of India's NFU Pledge

India first signaled an NFU policy in 1999 with the release of a draft doctrine declaring, "India will not be the first to initiate a nuclear strike."¹¹³ The word "initiate" is more ambiguous than "use," however, and seemed to leave open the possibility of preemption if an adversary attack were imminent. In 2003, India released a summary of its official nuclear doctrine that more clearly as-

York Times, May 13, 1998, <https://www.nytimes.com/1998/05/13/world/nuclear-anxiety-indians-letter-to-clinton-on-the-nuclear-testing.html>.

109. Bhaskar and Hongyi, "Comparing Nuclear Pledges and Practice," p. 37.

110. Bommakanti and Desai, *China's Nuclear Ambiguity*.

111. Samanvya Hooda, "'No First Use' of Nuclear Arms Policy Gives India Many Advantages; Govt Must Clarify Doctrine after Rajnath Singh's Tweet," *Firstpost*, August 19, 2019, <https://www.firstpost.com/india/no-first-use-of-nuclear-arms-policy-gives-india-many-advantages-govt-must-clarify-doctrine-post-rajnath-singhs-tweet-7178231.html>.

112. Ankit Panda, "India's Nuclear Rethink Won't Surprise China or Pakistan," *South China Morning Post*, August 25, 2019, <https://www.scmp.com/news/china/diplomacy/article/3024256/indias-rethink-no-first-use-nuclear-policy-wont-surprise-china>.

113. Brajesh Mishra, "India's Draft Nuclear Doctrine," Arms Control Association, July 1999, <https://www.armscontrol.org/act/1999-07/indias-draft-nuclear-doctrine>.

serted that India has “a posture of ‘No First Use[.]’ [N]uclear weapons will only be used in retaliation against a nuclear attack on Indian territory or on Indian forces anywhere.”¹¹⁴ Yet even this document qualified the commitment, noting that “in the event of a major attack against India, or Indian forces anywhere, by biological or chemical weapons, India will retain the option of retaliating with nuclear weapons.”¹¹⁵ Subsequent statements by Indian leaders have also watered down India’s pledge, introducing loopholes regarding possible circumstances under which India might use nuclear weapons before being attacked by them.¹¹⁶

These developments raise the question of how Pakistan has perceived India’s declaratory policy. Our theory predicts that given the extremely hostile political relationship between India and Pakistan, Pakistan would be reluctant to take an Indian NFU pledge at face value and would instead pay close attention to Indian military capabilities. The theory further predicts that even a latent Indian first-use capability would lead Pakistan to fear being subject to Indian nuclear first use in extremis and consequently to dismiss the credibility of the NFU pledge. Greater Indian first-use capabilities would only intensify these fears and further erode this credibility.

We find that these predictions fit well with the evidence on Pakistani perceptions. Pakistan never trusted India’s NFU declaration, even when India’s actual military capacity to use nuclear weapons first was extremely limited. Since the 2010s, when India’s first-use capabilities began to grow significantly more robust, Pakistan has even more emphatically dismissed India’s NFU pledge. These adversary perceptions—both Pakistan’s overall skepticism and the factors leading to it—confirm our argument.

PAKISTANI PERCEPTIONS OF INDIA’S NFU, 1999–PRESENT

It is uncontroversial to note that India and Pakistan have extremely hostile political relations.¹¹⁷ The rivals have fought three major wars since partition, in 1947–1948, 1965, and 1971. They are engaged in an active, long-running con-

114. Cabinet Committee on Security, “Cabinet Committee on Security Reviews Progress in Operationalizing India’s Nuclear Doctrine,” Prime Minister’s Office, January 4, 2003, <https://archive.pib.gov.in/archive/releases98/lyr2003/rjan2003/04012003/r040120033.html>.

115. Ibid.

116. Dhruva Jaishankar (@d_jaishankar), “1. It wasn’t a mistake. 2. That’s not quite what I said. 3. It was taken off the site (I think),” Twitter, July 1, 2016, 6:07 p.m., https://twitter.com/d_jaishankar/status/748941060727005184.

117. Sumit Ganguly, *Conflict Unending: India-Pakistan Tensions since 1947* (New York: Columbia University Press, 2002).

flict over the disputed territory of Kashmir, which among other escalations resulted in the 1999 Kargil War and a 2019 crisis during which India conducted air strikes on Pakistani soil for the first time since 1971. India also holds Pakistan responsible for major acts of terrorism in India, notably the 2002 attack on the Indian parliament and the 2008 Mumbai attacks. The two countries' military establishments remain fixated on each other.

Given this political context, our theory would expect Pakistan to pay close attention to Indian military capabilities, which it has. The reality, however, is that until at least the mid-2010s India's posture was not diverse and capable enough to be oriented for effective first use through coercive escalation or counterforce. India relied mostly on gravity bombs deliverable by aircraft, or short-range liquid fuel missiles that were de-mated and separated during peacetime. In a crisis, India would have had to take several visible steps and significant time to operationalize them.¹¹⁸ Obviously if India's forces were generated, all bets would be off, and India could in theory have engaged in coercive first use against countervalue targets. Nevertheless, if ever there was a case in which a peacetime nuclear posture tightly aligned with an NFU declaration, India through around 2010 was a strong contender.

Yet despite these quite limited Indian first-use capabilities—ones that truly could have been used only in extremis, and clumsily at that—Pakistani officials never accepted India's NFU pledge. From the outset, they pointed to India's vague language in the 1999 draft indicating that India would not be the first to "initiate" a nuclear strike. Particularly concerning to Pakistanis were comments from Prime Minister Vajpayee, only a year later after the Kargil War, expressing skepticism about the feasibility of an absolute NFU pledge and seeming to endorse the idea of preemption: "[W]e are being threatened [by Pakistan] with a nuclear attack. Do they understand what it means? If they think we would wait for them to drop a bomb and face destruction, they are mistaken."¹¹⁹

After the release of the 2003 summary, Pakistanis pointed to the caveats for chemical and biological weapons as further evidence that India's NFU commitment was not credible. For example, retired Pakistani two-star general Jamshed Ayaz Khan wrote in 2003:

118. Vipin Narang, *Nuclear Strategy in the Modern Era: Regional Powers and International Conflict* (Princeton, NJ: Princeton University Press, 2014), chap. 4.

119. Quoted in Sarabjit Pandher, "Talks Only on Return of PoK, Says Vajpayee," *Hindu*, February 7, 2000, <https://www.thehindu.com/todays-paper/tp-miscellaneous/tp-others/talks-only-on-return-of-pok-says-vajpayee/article28000464.ece>.

While earlier . . . India was categorical in its No First Use Policy, India now says, “In the event of a major attack against India, it will retain the option of retaliating with nuclear weapons.” That means “No First Use” is really out, India has now made it more ambiguous. Whenever they decide to use Nuclear Weapons against a State, they could just say that State X was planning to launch a major biological or chemical attack on India—the theory of unilateral preemptive strike formula could be commissioned. United States—the only Superpower has retained a similar option to prevent nations with chemical and biological weapons from assuming that the use of these weapons of mass destruction will not invite a nuclear response. India has taken out this part from USA’s doctrine.¹²⁰

Other Pakistani officials argued openly in track II settings that, especially in a crisis, India’s declaration was meaningless rhetoric and that nothing could physically restrain India from violating its NFU pledge in a conflict.¹²¹ At one such gathering in 2004, an active-duty Pakistani one-star general who went on to be director general of the Arms Control and Disarmament Affairs branch at the Strategic Plans Division candidly observed, “The possibility of Indian preemptive strike cannot be ruled out. To cater for such [an] eventuality, Pakistan has to factor in all options to ensure that its response remains viable. Thus the rising conventional imbalance and the lack of confidence in NFU are viewed as potentially destabilizing and risky.”¹²² This skepticism is consistent with our predictions.

Furthermore, Pakistan’s skepticism of India’s pledge started to deepen in the 2010s as India’s first-use capabilities improved significantly, most notably owing to the advent of the Agni land-based ballistic missile series and the K-15 Sagarika SLBM. These weapons not only grew the size of India’s arsenal but also, more importantly, endowed India with the ability to rapidly deliver accurate nuclear weapons against Pakistani strategic nuclear forces. In particular, India’s move toward so-called canisterized systems that pre-mated warheads to missiles enabled much more rapid use for counterforce purposes.¹²³ As Christopher Clary and Vipin Narang report:

120. Quoted in Rifaat Hussain, “Nuclear Doctrines in South Asia,” SASSU Research Report 4, South Asian Strategic Stability Unit, December 2005, p. 25, <https://www.files.ethz.ch/isn/99918/RR%20No%2004.pdf>.

121. Feroz H. Khan and Ryan W. French, *South Asian Stability Workshop: A Crisis Simulation Exercise*, PASC Report No. 2013-008 (Monterrey, CA: Center on Contemporary Conflict, U.S. Naval Postgraduate School, 2013), <https://doi.org/10.13140/RG.2.2.18225.68969>.

122. Khalid Banuri quoted in Peter R. Lavoy and Christopher Clary, “Strategic Stability in South Asia,” *Strategic Insights*, Vol. 3, No. 8 (August 2004), p. 3, <https://hdl.handle.net/10945/11232>.

123. Christopher Clary and Vipin Narang, “India’s Counterforce Temptations: Strategic Di-

In interviews, senior Indian civilian security officials and former Strategic Forces Command officers repeatedly suggest that some portion of India's nuclear force, particularly those weapons and capabilities designed for use against Pakistan, are now kept at a high state of readiness, capable of being operationalized and released within seconds or minutes in a crisis—not hours, as had been assumed. . . . Even during peacetime, a portion of India's land-based missiles are maintained at very high levels of readiness, and . . . at least some nuclear bombs for aircraft are colocated with aircraft on bases and stored in underground bunkers for rapid mating if necessary.¹²⁴

Furthermore, India's military has also greatly improved its intelligence, surveillance, and reconnaissance (ISR) capabilities and the C2 apparatus that would be needed to attempt counterforce missions as part of a damage-limiting first strike.¹²⁵ For example, regarding ISR, India's satellite network and unmanned aerial vehicle fleet are much more sophisticated and capable of tracking Pakistani nuclear forces today than in 2003. Regarding C2, Clary and Narang note that "although the narrative that India maintains all of its nuclear forces in a disassembled and de-mated state across various civilian agencies persists, it is largely a myth."¹²⁶ Furthermore, India is pursuing air defense and ballistic missile capabilities that could be used to attempt to intercept Pakistani ragged retaliation in the aftermath of an Indian first strike.¹²⁷ None of this is to say that India actually has a splendid first-strike capability against Pakistan. But it points to a more diverse array of targets that India might be able to strike today versus in the early 2000s, when it had a slow-moving countervalue capability at best.

Our theory would expect these improvements in India's military capabilities for first use to heighten Pakistani skepticism of India's NFU pledge, which is exactly what happened. For example, senior Pakistani diplomat Zamir Akram wrote in 2017, "For Pakistan, of course, these disclosures do not come as a surprise since Indian NFU is really a sham and political rhetoric. Besides, no responsible defence planners anywhere would accept political assertions from the opponent, especially since these are non-verifiable."¹²⁸ That same year, Moed Yusuf, who would become Pakistan's national security adviser, wrote,

lemmas, Doctrine, and Capabilities," *International Security*, Vol. 43, No. 3 (Winter 2018/19), p. 36, https://doi.org/10.1162/isec_a_00340.

124. *Ibid.*, p. 37.

125. *Ibid.*, pp. 31–38.

126. *Ibid.*, p. 36.

127. *Ibid.*, p. 35.

128. Zamir Akram, "Vipin Spills the Beans," *Express Tribune*, March 29, 2017, <https://tribune.com.pk/story/1368948/vipin-spills-beans>.

"The reality is that the Pakistani nuclear establishment and experts alike have never believed in the sanctity of the Indian NFU to begin with. No Pakistani nuclear or conventional choices assume a credible Indian NFU; in fact, all discount it. . . . When rivals are as mutually distrusting as India and Pakistan, scepticism about such declarations is only natural."¹²⁹

Meanwhile, commentary by senior Indian defense officials appearing to erode India's commitment to NFU only reinforced these Pakistani concerns about improvements in Indian capabilities.¹³⁰ Most notably, in 2019 Bharatiya Janata Party Minister of Defence Rajnath Singh traveled to Pokhran, the site of India's nuclear tests. This visit coincided with the anniversary of the death of Vajpayee and, in a scripted statement that represented the view of the government of India, Singh declared, "Pokhran is the area which witnessed Atal Ji's firm resolve to make India a nuclear power and yet remain firmly committed to the doctrine of 'No First Use.' India has strictly adhered to this doctrine. What happens in future depends on the circumstances."¹³¹ This comment may have seemed to reaffirm the NFU declaration. But, in fact, it did exactly the opposite; it gutted India's NFU pledge. NFU is a declaration that a state will not use nuclear weapons first *no matter the circumstances*. If a state declares that its use in the future "depends on the circumstances," then it does not in fact have an NFU pledge. The state will base its nuclear employment decision on the circumstances, which could include reasons to engage in nuclear first use.

As India's force posture evolved and its rhetorical erosion of its pledge accelerated, Pakistan responded with variations on "we told you so," making it

129. Moeed Yusuf, "Storm in a Teacup," *Dawn*, April 11, 2017, <https://www.dawn.com/news/1326134>.

130. Menon quoted in Ajai Shukla, "Will India Nuke Pakistani Cities, or Go for Its Nuclear Arsenal?," *Business Standard India*, March 20, 2017, https://www.business-standard.com/article/economy-policy/will-india-nuke-pakistani-cities-or-go-for-its-nuclear-arsenal-117031700921_1.html; Shivshankar Menon, "Speech by NSA Shri Shivshankar Menon at NDC on 'The Role of Force in Strategic Affairs,'" Ministry of External Affairs, October 21, 2020, <https://www.mea.gov.in/Speeches-Statements.htm?dtl/798/Speech+by+NSA+Shri+Shivshankar+Menon+at+NDC+on+The+Role+of+Force+in+Strategic+Affairs>; Vipin Narang, "Did India Change Its Nuclear Doctrine? Much Ado about Nothing," *ISDA Comment* (blog), Manohar Parrikar Institute for Defence Studies and Analyses, March 1, 2011, https://idsa.in/idsacomments/DidIndiaChangeitsNuclearDoctrine_vnarang_010311; "India Should Not Bind Itself to a 'No-First-Use Nuclear Policy,' Says Manohar Parrikar," *Scroll*, November 10, 2016, <https://scroll.in/latest/821251/india-should-not-bind-itself-to-a-no-first-use-nuclear-policy-says-manohar-parrikar>.

131. Rajnath Singh (@rajnathsingh), "Pokhran is the area which witnessed Atal Ji's firm resolve to make India a nuclear power and yet remain firmly committed to the doctrine of 'No First Use'. India has strictly adhered to this doctrine. What happens in future depends on the circumstances," Twitter, August 16, 2019, 8:16 a.m., <https://twitter.com/rajnathsingh/status/1162276901055893504>.

clear that Pakistan rejected the credibility of India's declaratory policy. For example, after Singh's comments, Pakistani Foreign Minister Shah Mahmood Qureshi stated, "The substance and timing of the Indian defence minister's statement is highly unfortunate and reflective of India's irresponsible and belligerent behaviour. It further exposes the pretense of their no first use policy to which we have never accorded any credence. . . . [The] no first use pledge is non-verifiable and cannot be taken at face value, particularly when development of offensive capabilities and force postures belie such claims."¹³² Similarly, according to reporters at a think tank roundtable convened after Singh's visit to Pokhran, retired general Naeem Salik "noted that the Indian defense minister's statement should not come as a surprise for Pakistan. He went on to explain that Pakistan has never believed in India's NFU declaration."¹³³ Along these same lines, Syed Mohammad Ali, a nuclear expert and senior fellow at the Islamabad Policy Research Institute stated, "Indian NFU has been a diplomatic farce to hide New Delhi's massive nuclear arsenal build up and global political ambitions. Pakistan never believed it. . . . Withdrawing the NFU policy . . . would be meaningless and would make no difference to Pakistan because Pakistani strategists do not believe in it in the first place. They proceed from the assumption that India can and would use nukes first in certain situations. Therefore, hinting today and announcing tomorrow that India has moved away from NFU to 'First Use' has no practical or operational connotations for Pakistan."¹³⁴

To sum up, Pakistan has never viewed India's NFU pledge as credible given that the two states have hostile political relations and that in extremis India has always had a latent if limited ability to use nuclear weapons first against Pakistan. As that first-use capability has evolved from crude (countervalue and delayed) to sophisticated (counterforce and rapid), Pakistan has shifted from distrusting India's pledge to completely rejecting it. This rejection and the reasons behind it are consistent with the predictions of our theory, and consistent with the patterns seen in the other cases.

132. Shah Mahmood Qureshi quoted in Reuters, "India's Statement Regarding 'No First Use' Policy on Nuclear Weapons Is Irresponsible: Foreign Minister," *Dawn*, August 16, 2019, <https://www.dawn.com/news/1499826>.

133. DNA News Agency, "India's Nuclear Policy Shift Could Intensify SA Arms Race," *Express Tribune*, August 27, 2019, <https://tribune.com.pk/story/2042945/indias-%20nuclear-policy-shift-intensify-sa-arms-race>.

134. *Ibid.*

Conclusion

The question of whether the United States should adopt an NFU pledge has arisen repeatedly in debates over declaratory policy and is likely to recur, making a careful assessment of the costs and benefits of such a policy important. Advocates emphasize the potential benefits of such a policy for strengthening crisis stability, decreasing hostility among nuclear-armed states, and bolstering nonproliferation and arms control cooperation among adversaries. Yet these benefits depend significantly (though not entirely) on U.S. nuclear-armed adversaries finding an NFU pledge credible—they need to believe that such a policy genuinely signals a U.S. commitment to forgo nuclear first use and is not just empty rhetoric. In this article we have leveraged available evidence on how nuclear adversaries perceived Soviet, Chinese, and Indian NFU pledges to better understand the conditions under which a similar declaration by the United States might be viewed as credible by U.S. opponents.

Consistent with our theory, the empirical record reveals that NFU pledges face a high bar to credibility, especially when they are most needed—the cases in which political relations are hostile and the pledging state actually has a military capability to use nuclear weapons first. Notably, we could not find any case in which an adversary perceived an NFU as credible when these two factors were present. Our theory's political and military variables explain why the United States never accepted the Soviet NFU declaration as credible, why India has never accepted China's as credible, and why Pakistan has never accepted India's as credible.

Changes in political and military factors also explain why the United States no longer accepts China's NFU as credible, though it did for many years when China lacked nuclear weapons that could reach the United States or when U.S.-China political relations were benign. Furthermore, this variation over time in U.S. perceptions of China's NFU, along with the cross-national variation in Indian and U.S. perceptions of China's pledge, is especially striking given that China's pledge itself has remained unchanged since 1964. That the pledge's credibility has varied with different adversaries and at different times reinforces that the effects of an NFU pledge depend on the political and military conditions identified in our theory, and do not automatically follow from a state having issued a rhetorical promise. If these political and military conditions are hard (though not impossible) to meet, then the potential benefits of an NFU pledge are likely to be significantly more limited than proponents

often claim, especially to the extent that those benefits depend on the perceptions of nuclear-armed adversaries, which are our focus in this analysis.

It is possible, of course, that a U.S. NFU pledge could still positively influence adversary perceptions. NFU advocates often emphasize that the benefits of such a policy are linear, not categorical; pledges can reduce nuclear problems even if they do not eliminate them, they argue. This may be true, but policymakers should adopt NFU on this basis only if they are sure that such a policy is otherwise relatively costless. Their repeated refusal to adopt NFU on the grounds of allies' concerns suggests that such a pledge is not costless, and that the adoption decision hinges on a careful weighing of the benefits versus the costs of a change in declaratory policy. This makes the question of rigorously assessing the magnitude of distinct benefits from an NFU pledge especially important, which requires knowing more about how adversaries will likely perceive such a policy. It is on this topic that our article has contributed new theorizing and data, even while recognizing that a final assessment on the overall wisdom of such a pledge must involve additional factors. Overall, however, our findings cast considerable doubt on the ability of NFU pledges by themselves to fully secure most of the benefits advocates emphasize. Instead, these pledges are credible only when the overall political relationship or military balance makes them largely unnecessary.

So, what do these findings suggest regarding a potential U.S. NFU declaration? First, they suggest that a declaration alone is unlikely to generate the stabilizing benefits that proponents envision. For such a pledge to seem remotely credible in the most relevant dyads, the United States would also need to undertake radical revisions to its force structure and nuclear posture, such as fully de-alerting or eliminating most of its arsenal. Granted, some NFU proponents do acknowledge the need for these types of accompanying changes. But our findings highlight that such changes would not be mere additions to bolster or enhance an NFU declaration; they would be fundamental to activating the benefits of such a policy, especially the benefits of crisis stability and political amity. Without them, a pledge simply will not change adversary perceptions. Furthermore, given that the United States is currently pursuing a large-scale nuclear modernization plan across all three legs of the triad, such changes seem extremely unlikely.¹³⁵

135. 2022 *Nuclear Posture Review: Selected Programmatic Issues* (Washington, DC: Congressional Research Service, March 24, 2023), <https://crsreports.congress.gov/product/pdf/IF/IF12357/2>.

Second, even if a U.S. NFU pledge were coupled with dramatic adjustments to nuclear force posture—a move that could have other serious downsides—the tense and even hostile U.S. political relationships with Russia, China, and North Korea would probably still lead them to question whether the United States would abstain from first nuclear use in a crisis or war. From the vantage points of Moscow, Beijing, or Pyongyang, it would be hard to dismiss the possibility of a U.S. SLBM launch even if the United States no longer had ICBMs, or to rule out crisis generation of a launch capability even if the United States kept its land-based forces more recessed in peacetime than they are now. The conflict situations in which these possibilities might arise would be, almost by definition, ones in which these other states would deeply distrust the United States, and hence even a latent residual U.S. nuclear capability for first use would likely be seen as threatening in extremis. Indeed, this pattern appeared repeatedly in the cases that we examined. For these reasons, U.S. adversaries would likely view a U.S. NFU pledge with skepticism, making it hard to see how such a policy would contribute to its intended objectives.