

Correspondence

James M. Lindsay and
Michael E. O'Hanlon

Limited National and Allied Missile
Defense

Charles L. Glaser
and Steve Fetter

To the Editors:

In their article "National Missile Defense and the Future of U.S. Nuclear Weapons Policy," Charles Glaser and Steve Fetter perform a valuable service for readers of *International Security* and, more generally, the U.S. debate on national missile defense (NMD).¹ Their nonpolemical treatment of the technical, military, diplomatic, and strategic issues in the missile defense debate is unusual for its rigor and thoughtfulness. They argue that deploying defenses against the possible rogue-state missile threat would have some value—especially if the defenses emphasized boost-phase systems on land, at sea, or in the air that could shoot down enemy missiles early in their flight before most countermeasures could be deployed. But at the same time, they wisely argue that missile defenses could do more harm than good for U.S. security if Russia and China are not reassured in the process.² On balance, given these latter concerns, the authors offer a decidedly ambivalent overall assessment of the desirability of NMD, but much sage advice about how NMD should be deployed if it is to be built.

Glaser and Fetter, however, tend to underestimate the potential importance of missile defenses. They do well to avoid the mistake of many NMD critics when they note that missiles have a certain cachet not possessed by "suitcase bombs." Missiles need not be predeployed by agents of questionable trustworthiness who must get past border inspectors without being caught. Moreover, their very existence can serve a political purpose even if their owners do not explicitly threaten to employ them. The authors are also surely right not to go to the other extreme and portray missiles as the top security threat facing the United States in the years ahead.

That said, there are three main points that Glaser and Fetter brush over too lightly or ignore altogether. All bolster the case for limited national missile defense, making the desirability of such a system greater than the authors allege—even if they are still right to argue that any NMD system must be limited and nonthreatening to Moscow and Beijing.

James M. Lindsay and Michael E. O'Hanlon are Senior Fellows at the Brookings Institution and authors of *Defending America: The Case for Limited National Missile Defense* (Washington, D.C.: Brookings, 2001).

Charles L. Glaser is a Professor in the Irving B. Harris Graduate School of Public Policy Studies at the University of Chicago. Steve Fetter is a Professor in the School of Public Affairs at the University of Maryland, College Park.

1. Charles L. Glaser and Steve Fetter, "National Missile Defense and the Future of U.S. Nuclear Weapons Policy," *International Security*, Vol. 26, No. 1 (Summer 2001), pp. 40–92. Additional cites appear parenthetically in the text.

2. It is hardly surprising that such an argument makes sense to us; we provide a similar one in our 2001 Brookings book, *Defending America: The Case for Limited National Missile Defense*.

ISSUE #1: THE POSSIBILITY OF DETERRENCE FAILURE

The most important issue that Glaser and Fetter neglect is the question of when deterrence can fail. They do note that such deterrence failure is possible, and briefly give plausible reasons why it might occur. But ultimately, they conclude that such an outcome is “probably unlikely even relative to the [other] scenarios” that they outline (pp. 67–68, at p. 68). The subject merits much greater discussion.

Under most circumstances, rogue-state leaders are likely to be just as deterrable as were Soviet leaders. North Korea has been dissuaded from launching a second Korean war for nearly half a century. Iraq has tested the United States on numerous occasions since the end of Desert Storm—but has not pushed so far as to provoke war.

Nonetheless, deterrence is not totally reliable. It is imperfect because crises have internal dynamics capable of producing outcomes that would not have been foreseen or desired at their outset.³ There are also scenarios in which classic deterrence theory is irrelevant. Most notably, the logic of deterrence does not apply to a national leader who believes that he is highly likely to be captured or killed during a war.

If the United States were to fight Iraq or North Korea again, as current Pentagon plans assume that it might, Washington would want to have the option of overthrowing their regimes and occupying their territories. Indeed, it is largely for such reasons that Pentagon strategy for the last ten years has postulated the possibility of two nearly simultaneous military operations each involving half a million U.S. troops. The decline of the Iraqi and North Korean threats, together with the ongoing strengthening of the South Korean military, make it unlikely that such large forces would be needed just to protect allied territory from conquest. Given the harm already done and the dangers posed by the Iraqi and North Korean regimes, there is a compelling argument for overthrowing them should they again initiate hostilities.

It is at that point that classic deterrence theory no longer applies. Consider what might happen if, during a war, the United States and any coalition partners chose to invade an enemy country, overthrow its regime, and occupy its territory. Under such circumstances, a rogue-state leader would no longer have the same incentive to hold back that Saddam Hussein did in the 1991 Persian Gulf War. In that war, Washington established an implicit agreement with Saddam—there were rules of a sort for conducting the war. The rules were: If you do not use chemical or biological weapons and otherwise abstain from horrific actions that you could take, the United States and its coalition partners will not overthrow your regime or use nuclear weapons against your country.⁴

Implicit in that bargain was the recognition that if coalition forces had marched on Baghdad in 1991, Saddam would have had reason to use whatever weapons he possessed. He would have already recognized that his regime’s survival and quite possibly

3. For a discussion of this, albeit in the superpower context, see Thomas C. Schelling, *Arms and Influence* (New Haven, Conn.: Yale University Press, 1966), pp. 1–125.

4. For arguments along these lines, see Barry R. Posen, “U.S. Security Policy in a Nuclear-Armed World, Or: What If Iraq Had Had Nuclear Weapons?” *Security Studies*, Vol. 6, No. 3 (Spring 1997), pp. 1–31; Scott D. Sagan, “The Commitment Trap: Why the United States Should Not Use Nuclear Threats to Deter Biological and Chemical Weapons Attacks,” *International Security*, Vol. 24, No. 4 (Spring 2000), pp. 91–96; and James A. Baker III, *The Politics of Diplomacy: Revolution, War, and Peace, 1989–1992* (New York: G.P. Putnam’s Sons, 1995), p. 359.

his own life were at stake, and therefore anything he could have done to stop the invasion would have been selfishly rational—albeit evil—even if it caused more bloodshed. If coalition forces were already marching on Baghdad, it is hard to see how things could have gotten worse for Saddam. If he had had nuclear weapons and ballistic missiles, he might well have used them in one last-gasp effort to stop the coalition.

Put differently, consider McGeorge Bundy's wise words in reflecting on the first forty-three years of the nuclear era: "Both history and logic make it clear that no government will resort to nuclear weapons over a less than mortal question."⁵ But what if the issue were indeed mortal? In that case, the argument for nuclear restraint would be far less compelling.

Glaser and Fetter hint at the possibility of such a scenario, but do not give it much credence or spell it out, though it is hardly implausible. Assume that, in a future war, a rogue-state leader had two or three long-range missiles with nuclear or biological warheads when U.S.-led forces began an operation to overthrow his regime. At that point, the leader might launch a missile at a small city somewhere in the United States or Western Europe to prove that he was willing and able to do so. He might then threaten to launch more missiles at larger cities if the invasion was not immediately halted and foreign armies withdrawn from his territory.

This case also shows why President George W. Bush and his administration are right to argue that missile defense should provide protection to U.S. allies as well as to American territory. In the above scenario, if the United States were defended against long-range missiles while its key allies were not, a rogue leader could simply threaten London, Paris, or Oslo instead of New York or Washington. Were those capitals vulnerable to attack, coalition war options could be constrained just as severely as if the United States itself were vulnerable, and the leader in question might very well succeed in coercing coalition forces into reversing their invasion.

Enemy missile launch could occur for other reasons as well. Even if an enemy leader had already accepted the inevitability of his downfall, he might choose not to go quietly. Instead he might employ a "Samson scenario," after the biblical figure who pulled down the Philistine temple to kill himself along with his captors, and attempt to kill as many Americans as possible in the process. This possibility is hardly mythical. To take a more modern image, it simply assumes that a leader might behave like trapped or outnumbered Japanese soldiers in World War II—who often fought to the death even when defeat was foreordained—rather than surrender or commit suicide like Adolf Hitler. Moreover, even if a country's top leader did not choose to mimic Samson, his military commanders might.

As noted, although Glaser and Fetter do briefly acknowledge that there could be cases of deterrence failure, they consider the probabilities quite low. But the odds do not strike us as low under such counterinvasion-and-overthrow scenarios.

Glaser and Fetter also suggest that a missile defense system would be of little utility in such situations because the United States would lack enough confidence in its effectiveness to undertake particularly risky military operations (p. 69). But they underestimate the dangers of leaving extremist leaders in power to seek vengeance on another

5. McGeorge Bundy, *Danger and Survival* (New York: Vintage, 1988), p. 588.

day, perhaps with even more powerful weapons or more effective means of delivery. A sufficiently angry rogue leader might also seek vengeance by transferring weapons of mass destruction to an apocalyptic terrorist organization that might employ them against Americans out of sheer hatred.⁶ Under such circumstances, the risk that a missile defense might fail would have to be weighed against the risk that a dangerous regime left in power could again cause grave problems for the international community.

ISSUE #2: MISSILES' PREWAR COERCIVE VALUE

National missile defense could also be useful in crisis situations before a war began. An enemy could explicitly or implicitly threaten missile attack against the United States in an effort to weaken the will of American allies, the American public, and the Congress.⁷ Such a strategy could be designed to reduce Washington's will to come to the defense of its allies. It could also try to make those allies doubt Washington's commitment to their defense, increasing the odds that they would appease a regional aggressor before a crisis escalates.

Glaser and Fetter do not properly acknowledge the possible benefits of U.S. national missile defense for bolstering the confidence of local allies and the American public under such conditions. They pay little attention to the issue. When they do address it, their main point seems to be that the likely existence of enemy short-range missiles would intimidate nearby U.S. allies even if the United States had NMD, making the latter largely irrelevant.

The logic of extended deterrence, however, suggests otherwise. Consider first the American public and the Congress. To some extent, NMD could bolster their confidence and resolve during a crisis. Even if the effect was relatively marginal, it could be important, especially in the two-party system of the United States. To see why, recall that the congressional vote authorizing the use of force in the Gulf War was very close (a relatively comfortable 250 to 183 in the House, but just 52 to 47 in the Senate).⁸ At the time of the vote, Saddam did not have long-range missiles or nuclear weapons. It is easy to imagine that vote going the other way had Saddam possessed the ability to attack the U.S. homeland directly with weapons of mass destruction. U.S. NMD might or might not have been sufficient reassurance to shore up Congress's resolve. But it surely would have helped, perhaps decisively—just as it could steel the country's resolve in a war in which the enemy might well have long-range ballistic missiles.

As for U.S. allies located near a threatening enemy, it is true that U.S. NMD against long-range missiles would offer them little or no direct protection. They would still be vulnerable to shorter-range missiles and other forms of attack. But if they were confident that their American ally would stand by them, in thick and thin, their own re-

6. Although most terrorist organizations remain unlikely to use weapons of mass destruction, a growing number are motivated by extremist and apocalyptic agendas and may have no such qualms. Osama bin Laden and his al-Qaeda organization are the most notable case in point. See Paul R. Pillar, *Terrorism and U.S. Foreign Policy* (Washington, D.C.: Brookings, 2001).

7. We are indebted to Philip Gordon of the Brookings Institution and Stephen Peter Rosen of Harvard University for sharing some of these ideas.

8. Michael R. Gordon and Bernard E. Trainor, *The Generals' War: The Inside Story of the Conflict in the Gulf* (Boston: Little, Brown, 1995), p. 205.

solve would be strengthened. NMD cannot protect regional allies, just as the U.S. nuclear deterrent could not physically protect Europe or Japan during the Cold War. But if NMD strengthens U.S. will, it indirectly benefits regional allies as well, by making Washington more likely to stand by its allies, and thereby improving the odds that aggressors will ultimately be deterred from starting wars in the first place.⁹ Admittedly, NMD's contribution to extended deterrence may be less than that of U.S. conventional military superiority or an American administration's political credibility and reputation for resolve. But that hardly makes missile defense unimportant.

A specific example may make these considerations more vivid. Imagine that Saddam's son Uday someday becomes president of Iraq, that Uday's ambitions rival those of his father, and that Iraq has also managed to obtain long-range nuclear-armed missiles. Under such circumstances, Uday might order another Iraqi attack on Kuwait, optimistic about his prospects for deterring the United States from becoming involved. He might further try to improve his odds of success by aiming only to conquer some of Kuwait's oil fields rather than its entire territory, and by avoiding direct attacks on whatever U.S. forces may still be continuously deployed in the region. The combination of a bigger Iraqi stick and a more limited Iraqi act of aggression might strike Uday as a war-winning formula. He might gain further confidence if facing a U.S. government not longer populated with the heroes of the 1991 Gulf War or similar figures.

In this context, perceptions would matter, as would recent trends. If all those trends favored Iraq, Uday might convince himself that an attack on Kuwait would succeed, and an otherwise preventable regional conflict might occur. On the other hand, U.S. missile defenses, together with robust conventional forces and resolute political leadership, might help to neutralize any perceived swings of momentum in favor of Iraq.

ISSUE #3: THE DIFFICULTY OF PREEMPTION

Glaser and Fetter are optimistic that the United States would know, or quickly determine, the locations of any enemy ICBMs early in a conflict, making preemptive destruction of those missiles a straightforward proposition. As they put it, "Rogue states are extremely unlikely to have survivable ICBMs" (p. 67).

That optimistic assessment seems to postulate that rogue-state intercontinental ballistic missiles (ICBMs) would be deployed much as U.S. and Soviet forces were during the Cold War. Because U.S. imaging satellites of the 1960s and 1970s could see Soviet missile silos, there is little doubt, according to this line of reasoning, that U.S. intelligence capabilities of the twenty-first century would be able to find the fixed long-range missiles wielded by a lesser foe.

There would indeed be a good chance that the United States would know the locations of enemy ICBMs. In that case, it would likely launch preemptive attacks against them in the opening hours of an air war. The United States might not be willing to preempt, however, if that required it to fire the first shot—just as President John F. Kennedy chose not to initiate air strikes against Soviet missiles during the Cuban missile crisis of

9. For a discussion of extended deterrence during the Cold War, see David N. Schwartz, *NATO's Nuclear Dilemmas* (Washington, D.C.: Brookings, 1983), pp. 136–192.

1962.¹⁰ Glaser and Fetter appear to acknowledge this point (on p. 68), but they do not spell out its implications. Those implications are important, as argued above in the section on missiles' coercive value before a war. The American public and Congress would have to worry that an enemy could initiate a war with an ICBM attack on U.S. territory. Knowing that same fact, regional allies might doubt Washington's resolve, and extended deterrence would likely suffer.

One must also face the possibility that preemption would fail to eliminate an adversary's entire inventory of long-range missiles, and thereby possibly trigger the very attack it was intended to prevent. An enemy might be able to make its ICBMs mobile—not an easy feat for a small power, but not out of the question either. In that case, even with improvements in U.S. intelligence capabilities, the search for enemy ICBMs could resemble the futile pursuit of Scuds during Desert Storm.¹¹

More likely, enemy ICBMs would not be mobile. But even in that case, the United States could have difficulty locating them. It would surely find them if they were to be fired from the same above-ground launch pads used in an enemy country's flight testing programs. An enemy might be more ingenious, however. It might make efforts to conceal the construction of missile silos in ways that were prohibited by SALT during the Cold War. It might dig numerous holes, with only some intended for real ICBMs and the rest intended to confuse U.S. intelligence. It might, James Bond-style, create underground caverns as a work space. It might then cover both the real and mock silos with tents to confuse U.S. intelligence. Anyone who doubts that the likes of North Korea might make such an effort need only review the hermit kingdom's fascination with underground operations, together with the recent progress in dirt-moving and tunneling technology.¹²

On its own, then, preemption is easier to urge than to carry out. Before a war has begun, presidents are apt to discard it as an option, as Kennedy did during the Cuban missile crisis, because no one can assure them that it will be 100 percent effective. When combined with a working missile defense, however, preemption becomes a much more viable strategy. Defenses provide a safety net in the event that some enemy missiles survive the initial attack, just as a preemptive attack that destroys some but not all enemy missiles can make the defense's job easier. In short, rather than being alternative strategies, preemption and missile defense can reinforce each other.

CONCLUSION

Glaser and Fetter are surely right that national missile defense could entail strategic costs that outweigh its benefits. Indeed, the Bush administration's present plan to cast away any and all negotiated constraints on missile defense in pursuit of a multitiered, large-scale system is precisely the type of missile defense ambition that threatens such a

10. Graham T. Allison, *Essence of Decision: Explaining the Cuban Missile Crisis* (Boston: Little, Brown, 1971), pp. 123–126; and Bundy, *Danger and Survival*, pp. 401, 425, 456–457.

11. See Thomas A. Keaney and Eliot A. Cohen, *Gulf War Air Power Survey Summary Report* (Washington, D.C.: Government Printing Office, 1993), p. 119.

12. Walter Pincus, "Buried Missile Labs Foil U.S. Satellites," *Washington Post*, July 29, 1998, p. A1.

result.¹³ It risks seriously worsening great-power security relations. That in turn could jeopardize cooperative programs with Moscow and Beijing to downsize and improve the safety of superpower nuclear arsenals, put excess Russian nuclear materials under better lock and key, stem proliferation, and cooperate on matters such as sanctions on Iraq and pressuring North Korea to terminate its missile exports.

But the basic logic of a limited long-range missile defense for the United States and its allies is still sound—deployed under a negotiated framework with Russia if possible, unilaterally if absolutely necessary. Rogue-state leaders are not less deterrable than Soviet leaders were, but deterrence can still fail and indeed would hardly apply if the United States sought to overthrow an enemy regime in a war. Enemy missiles might not dissuade a U.S. president from defending overseas American interests when they come under threat. But these missiles could weaken the resolve of American citizens, the U.S. Congress, and U.S. allies abroad—possibly emboldening an aggressor to attack. Finally, even though U.S. military preemption of enemy missile forces might work, it would be a difficult option to invoke during a crisis—and it might well fail for technical reasons against a resourceful foe. All these considerations suggest that, although it should hardly be the dominant focus of American defense planners, long-range missile defense should be developed and deployed by the United States in the years ahead.

—James M. Lindsay
Washington, D.C.

—Michael E. O'Hanlon
Washington, D.C.

The Authors Reply:

We agree with many of the points that James Lindsay and Michael O'Hanlon make in their response to our article. Where we disagree, it is mostly on judgments of the likelihood of various scenarios and the perceptions of future leaders of the value of missile defense systems that now exist only on paper. On the broad spectrum of opinion that defines current U.S. debate over national missile defense—from complete opposition to support for full-scale deployment of a multilayer NMD designed to undermine Russian and Chinese nuclear retaliatory capabilities—our policy conclusions are fairly close to theirs.¹ There are, however, differences in both our analysis and our conclusions that are worth exploring.

13. For evidence that the Bush administration plans a large-scale missile defense, see Michael O'Hanlon, "Double Talk on Missile Defense," *Washington Post*, July 31, 2001, p. A23.

1. The key difference is whether the United States should deploy a limited midcourse NMD system. For their well-argued analysis in favor, see James M. Lindsay and Michael E. O'Hanlon, *Defending America: The Case for Limited National Missile Defense* (Washington, D.C.: Brookings, 2001); for our analysis against, see Charles L. Glaser and Steve Fetter, "National Missile Defense and the Future of U.S. Nuclear Weapons Policy," *International Security*, Vol. 26, No. 1 (Summer 2001), pp. 40–92. We believe that the midcourse NMD systems that could be deployed in the near term would not be effective against the sorts of countermeasures that are within the reach of any state

DETERRENCE

Lindsay and O'Hanlon argue that we have underestimated the probability that the United States will fail to deter a missile attack by a rogue state, and therefore that we undervalue the expected benefits of NMD. At the danger of oversimplification, the challenge posed by Lindsay and O'Hanlon is captured by the following scenario: Iraq acquires ICBMs and nuclear weapons; Iraq then invades Kuwait; in response, the United States decides to invade Iraq and overthrow Saddam Hussein and his regime.² With his survival at stake, Saddam might believe that he has nothing to lose by launching his nuclear-armed ICBMs, making NMD necessary for protecting the United States. By focusing on a scenario that worries U.S. foreign policy experts and has driven U.S. conventional force planning, Lindsay and O'Hanlon's analysis makes more vivid the dangers and incentives that the United States would face. We agree that in this scenario, all else being equal,³ the United States would be better off with NMD than without it.

This scenario is highly conditional, however, and the value of NMD is significantly lower than Lindsay and O'Hanlon imply. First, Iraq is not expected to acquire an ICBM for at least ten years, and possibly much longer. Moreover, it may take as long or longer for Iraq to acquire a nuclear weapon that is small and light enough to be carried on an ICBM. As illustrated by the collapse of the Soviet Union, significant political change can occur in a relatively short period—Saddam might no longer be Iraq's ruler, potentially reducing the country's desire for this combination of technologies. Although surprises are always possible, the delay and uncertainty in the emergence of the threat affords the United States an opportunity to defer a decision on deploying NMD, while pursuing research and development of the most promising technologies.

Second, although Iraq's acquisition of nuclear-armed ICBMs might increase its willingness to invade Kuwait, the United States could pursue a variety of conventional, nuclear, and diplomatic policies to reduce the probability of Iraqi nuclear aggression.⁴ Many of these, including a declaration that made clear U.S. willingness to use nuclear weapons in retaliation and efforts to ensure that Iraqi leaders knew that the United States had developed operational plans for their use, would be designed to reduce the counter-deterrent value of the Iraqi nuclear threat. They might therefore largely offset the advantages that Iraq had hoped its nuclear weapons would provide.

Third, and perhaps most important, a decision to invade Iraq and overthrow its regime is entirely under U.S. control. Lindsay and O'Hanlon may be correct that if Iraqi

that could deploy an intercontinental ballistic missile (ICBM) armed with a nuclear or biological warhead, and that any confidence U.S. leaders might have in such systems would be misplaced.

2. Similar scenarios can be imagined involving North Korea or Iran, or ICBMs armed with biological rather than nuclear warheads. But for reasons explained in our article, we do not believe that the expected value of NMD would be greater under these scenarios. For example, although North Korea would be able to deploy nuclear-armed ICBMs earlier than Iraq, it has indicated a willingness to terminate its development of long-range missiles in exchange for economic and diplomatic incentives.

3. Of course, all else may not be equal. For example, NMD could strain U.S. relations with Russia and China, in which case these costs must be weighed against NMD's benefits.

4. On these arguments in a somewhat different context, see Barry R. Posen, "U.S. Security in a Nuclear-Armed World (Or: What If Iraq Had Had Nuclear Weapons?)," *Security Studies*, Vol. 6, No. 3 (Spring 1997), pp. 16–21.

or North Korean leaders once more invade their neighbors there would be a “compelling argument for overthrowing them.” But if they have nuclear weapons, there would be an even more compelling case for not attempting to overthrow them. As Lindsay and O’Hanlon argue, a U.S. invasion of a rogue state is the scenario most likely to trigger missile attacks. Unless U.S. leaders are virtually certain that NMD would work perfectly, which they could not reasonably be, the case against invasion and overthrow should almost always weigh more heavily than the case in favor. Even complete confidence in a flawless NMD might be insufficient for U.S. leaders to risk invasion of an adversary armed with nuclear or biological weapons, because it is reasonable to worry that rogue leaders, contemplating aggression in the face of an NMD system designed to nullify the deterrent effect of their ICBMs, would prepare to deliver such weapons of mass destruction (WMD) by other means, before initiating hostilities.

We are not arguing that the United States should allow aggression by rogue states to go unchallenged, only that its response should be limited. A limited war strategy would reduce the value of a rogue state’s WMD for supporting aggression while limiting its incentives for escalation.⁵ In this case, U.S. deterrence of rogue missile attacks, especially against the U.S. homeland, would be more likely to succeed, and NMD consequently would be less valuable.

Nor are we arguing that deterrence is so reliable that rogue-state acquisition of nuclear and biological weapons and ICBMs does not hurt U.S. interests. In the case of an Iraqi invasion of its neighbors, the United States would probably have to reduce its war aims because of the greatly increased risk accompanying a U.S. invasion. In addition, however effectively the United States plans and implements its deterrent and limited war strategy, there is always some chance that nuclear or biological weapons might be used—intentionally, accidentally, or without authorization—against the United States, its forces, or its allies. But deploying an NMD system—even one that is highly effective—cannot eliminate the impact of rogue-state weapons of mass destruction. Put another way, proliferation of nuclear and biological weapons is so bad that realistic NMD cannot solve the problem.

In sum, because deterrence could fail, NMD would have some value against a rogue state with nuclear-armed ICBMs, but how much value depends on the probability of the most dangerous scenarios, especially how much the United States can influence them. Although many complex judgments are involved, we believe that Lindsay and O’Hanlon’s discussion of counterinvasion and overthrow scenarios exaggerates the probability of deterrence failure and the value of NMD.

Another point about deterrence deserves brief attention. We agree with Lindsay and O’Hanlon that *limited* Iraqi nuclear use to compel the United States to halt an invasion of Iraq is one of the more likely ways that nuclear deterrence could fail. We emphasized this type of scenario (pp. 66–67) because it would have a clear logic that did not rely simply on desperation or revenge. As we note, however, this strategy makes sense only if Iraqi ICBMs and command and control could survive U.S. nuclear retaliation. As we discuss briefly below, we disagree with Lindsay and O’Hanlon on the prospect of survivable rogue ICBM capabilities.

5. For an incisive analysis of this strategy, see *ibid.*, pp. 22–28.

NMD AND U.S. FOREIGN POLICY

Lindsay and O'Hanlon identify a variety of ways in which a rogue state's ICBMs and WMD could undermine the willingness and ability of the United States to protect its foreign policy interests, and suggest that NMD could solve this problem.⁶ This argument is closely related to the deterrence argument discussed above: The possibility that the United States could not deter Iraqi escalation would undermine U.S. willingness to pursue certain foreign policy objectives. For example, the difficulty of deterring Iraqi nuclear attacks following an invasion to overthrow the regime should reduce U.S. willingness to pursue this policy in the first place. The question is whether NMD can restore U.S. willingness to pursue policies that increase the risk of escalation. Although Lindsay and O'Hanlon describe a scenario in which even a small contribution from NMD would be critical to Washington's decision to pursue U.S. foreign policy goals, we believe that NMD should rarely tip the balance.

The argument in our article, and elaborated above, emphasized the limited nature of U.S. foreign policy interests and enormous potential costs of a rogue-state attack, given the uncertain effectiveness of U.S. NMD and the possibility that WMD could be delivered by means other than ICBMs. There are cases in which the United States probably should engage in conventional conflict with an adversary that has nuclear-armed ICBMs, but the United States would need to limit its war aims to reduce the likelihood of rogue attacks against U.S. and allied cities. The willingness of the United States to pursue these limited war aims would not depend on its having NMD, although NMD would reduce the expected damage of rogue escalation. NMD, however, would rarely make attractive the foreign policy options that were eliminated by the rogue state's proliferation. Key U.S. interests could be achieved by a limited war that restored the status quo ante. The additional benefits of overthrowing the rogue regime would usually be too small to warrant the significant increase in the probability of rogue escalation, even with NMD. The defense provided by NMD is unlikely to be sufficiently effective or comprehensive to make more ambitious foreign policies the best option, because even a small probability of having one U.S. or allied city destroyed by a rogue nuclear weapon would be too large to warrant pursuing the potential benefits of overthrowing a rogue leader. Even if U.S. NMD had completed a highly effective test program, U.S. leaders would lack grounds for being confident in its capability because its effectiveness would not have been proven in combat against rogue missiles and countermeasures. Consequently, the potential costs of rogue escalation would remain too high, which is why we concluded that NMD could be valuable for reducing the damage to the United States, but should rarely if ever restore significant leeway to U.S. foreign policy. Moreover, if U.S. leaders overestimate the effectiveness of NMD and march to Baghdad as a result, then deploying NMD could reduce U.S. security—increasing the probability that deterrence would fail, while leaving the U.S. homeland vulnerable to attack.

A possible exception to this general argument, which Lindsay and O'Hanlon raise, might be if the United States concluded that it needed to overthrow a regime to prevent

6. On the importance of this type of argument in the current debate, see Bill Keller, "Missile Defense: The Untold Story," *New York Times*, December 29, 2001, p. 29; and Victor A. Utgoff, *Missile Defense and American Ambitions* (Alexandria, Va.: Institute for Defense Analysis, September 2001).

larger nuclear dangers in the future—including the possible transfer of nuclear weapons to a terrorist group. If such dangers were judged to be extremely large, then even imperfect NMD might reduce the risks of escalation enough to make a preventive war the United States' best option. It would be difficult to conclude, however, that the risks of preventive war were smaller than the risks of not attacking, unless the rogue regime had already taken actions so egregious, irresponsible, or irrational as to make clear that the threat it posed would only grow with time. In this case, the United States should consider preventive war under much less dangerous conditions—before Iraq has ICBMs and nuclear weapons. In addition, if this window of opportunity closes before it acts, the United States might not want to wait for the “excuse” of an Iraqi invasion of a neighbor to launch attacks designed to destroy Iraq's WMD and delivery capabilities. Although addressing these possibilities and related issues is well beyond the scope of this brief reply, we anticipate that NMD is unlikely to be a major factor in determining U.S. decisions about preventive war.

PREEMPTION

Lindsay and O'Hanlon argue that preemption is not as easy as we suggest, emphasizing both problems that the United States could have in destroying rogue ICBMs and its reluctance to launch a preemptive attack. We agree with their strategic arguments about preemption: The United States might choose not to preempt, but if it did, NMD could complement a partially successful preemptive attack in reducing damage to the United States. We also note that one of our main points about survivable forces—their central role in the effective coercive use of limited nuclear attacks—does not rely on U.S. preemption, but only on the ability of the United States to destroy remaining rogue forces after it has suffered a nuclear attack.

Although it is possible to imagine situations in which the United States would not preempt, in the scenario that Lindsay and O'Hanlon find most worrisome and most likely to lead to a failure of deterrence—a U.S. invasion designed to overthrow the leader of a rogue state that had invaded one of its neighbors—rogue missile and WMD sites would certainly be the first targets of a U.S. attack. President John F. Kennedy's reluctance to order attacks against missile sites and an invasion of Cuba is not a good comparison in this regard because Kennedy wanted to avoid triggering an all-out war with the Soviet Union (whereas in this case the United States would be launching an all-out war), and because other options for achieving U.S. goals were available.

Although Lindsay and O'Hanlon agree that there is a good chance that the United States would know the locations of enemy ICBMs, they raise the possibility that a rogue state might be able to hide its ICBMs or make them mobile. However, in contrast to the mobile ICBMs developed by the United States, Russia, and China, which are solid-fueled and can be launched directly from a mobile transporter in a matter of minutes, the ICBMs that might be developed by rogue states would be liquid fueled and incapable of being moved when ready for launch. Empty missiles could be transported to (or emerge from) hidden launch sites, but the process of erecting and fueling them would take at least several hours and involve many large vehicles. Each missile would be nearly 100 feet tall and weigh on the order of 100 tons (compared to 6 tons for the Scud). It would be difficult to hide this activity from U.S. reconnaissance satellites and from

aircraft that would be scouring the countryside during the opening hours of an air war.⁷ It likewise would be difficult to hide the construction, equipping, and operation of a giant underground launch facility; just removing the rock would require thousands of trips by dump trucks. Lindsay and O'Hanlon also worry that an enemy might prepare multiple launch sites or decoy sites, but the U.S. arsenal would be large enough to attack all sites that it could identify. Although it would be impossible to guarantee that all rogue ICBMs would be identified, U.S. prospects would be quite good.

CONCLUSION

Despite these differences, our broad policy conclusions are not far from those of Lindsay and O'Hanlon: Limited NMD could increase the security of the United States, if the international political costs vis-à-vis Russia, China, and its long-term security partners are managed carefully. We are less enthusiastic about limited NMD than are Lindsay and O'Hanlon, but would favor deployment of a surface-based boost-phase system if Washington pursues ambitious diplomatic efforts to minimize the international political costs, if research and development prove that the technologies are promising, and if rogue states continue to advance their ICBM and WMD capabilities.

We find it difficult to muster much enthusiasm, however, when U.S. NMD policy diverges so significantly from these guidelines. The Bush administration withdrew from the 1972 Antiballistic Missile Treaty without offering proposals that could have greatly reduced Russia's and China's political and strategic concerns. Although improved relations since the September 11 attacks on New York and Washington, D.C., appear to have reduced the near-term political costs, we see little reason to be confident that these costs will remain low over the longer term. President George W. Bush claimed that the terrorist attacks made it clearer that the ABM Treaty was outdated, yet he failed to explain how this could be the case when terrorist groups cannot plausibly acquire long-range ballistic missiles. If anything, September 11 should have moderated U.S. NMD policy because good political relations with other major powers became more important and policies designed to counter catastrophic terrorism gained greater claim on limited U.S. resources. Given this policy landscape, we find ourselves reluctant to lend nuanced support to limited NMD instead of opposing NMD altogether.

—Charles L. Glaser
Chicago, Illinois

—Steve Fetter
College Park, Maryland

7. Photoreconnaissance satellites could detect activity at known or suspected missile sites several times per day. After the war begins, three or four JSTARS (Joint Surveillance Target Attack Radar System) aircraft could detect vehicle movements over the entire area of North Korea or Iraq, even at night or during bad weather. Two dozen Global Hawk UAVs (unmanned aerial vehicles), which have visual and infrared as well as radar sensors, could cover the same area every hour. Fighter aircraft would also conduct surveillance, attacking targets as they are identified. Although these missions might entail significant risks to aircraft before enemy air defenses are destroyed and air superiority is achieved, the possibility that a nuclear-armed ICBM might be launched against a U.S. city would easily justify such risks.