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Averting Catastrophe: Why the Nuclear Nonproliferation Treaty is Losing its Deterrence Capacity and How to Restore it

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AVERTING CATASTROPHE: WHY THE NUCLEAR NONPROLIFERATION TREATY IS LOSING ITS DETERRENCE CAPACITY AND HOW TO RESTORE IT

Orde F. Kittrie*

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INTRODUCTION

Armed only with boxcutters, the nineteen al Qaeda hijackers on September 11, 2001, killed almost 3,000 people and caused tens of billions of dollars in damage to New York City, the Pentagon, and the global economy.¹ This toll would be dwarfed by a “nuclear 9/11”—a nuclear attack launched by a terrorist state or group. Detonation of a small, crude nuclear weapon in a major city could kill more than 500,000 people and cause over one trillion dollars in damage.²

² See, e.g., MATTHEW BUNN, ANTHONY WIER & JOHN P. HOLDREN, NUCLEAR THREAT INITIATIVE, CONTROLLING NUCLEAR WAREHEADS AND MATERIALS: A REPORT CARD AND ACTION PLAN 15–16, 18 (2003), http://www.nti.org/e_research/cnwm/cnwm.pdf (estimating that terrorist detonation of a ten-kiloton nuclear bomb at New York City’s Grand Central Station on an average workday would likely kill more than half a million people and that its “direct” economic costs would be well over one trillion dollars); MEADE & MOLANDER, supra note 1, at xvi, 6 (estimating that the “early costs” of a ten-kiloton nuclear detonation in the Port of Long Beach, California, “could exceed $1 trillion”). A ten-kiloton
The Nuclear Nonproliferation Treaty (NPT) has, since its entry into force in 1970, been at the heart of international efforts to prevent the spread of nuclear weapons. During its first twenty-five years, the NPT played a central role as nuclear nonproliferation efforts met with remarkable success. In 1963, President John F. Kennedy predicted as many as “fifteen or twenty” states could possess nuclear weapons by 1975. In fact, the number of states possessing nuclear weapons grew by only one (from six to seven) between 1970 and 1995. The NPT deserves much of the credit for this outcome. The NPT’s membership grew from forty-three states at the time of its entry into force in 1970 to 181 by the end of 1995. Only a handful of major countries—including India, Israel, and Pakistan—had failed to become NPT parties by the end of 1995. NPT explosion can be achieved with a relatively crude design. Id. at 2. The yields of the nuclear weapons used against Hiroshima and Nagasaki were 12.5 and twenty-two kilotons respectively. Id. at 1. The Pakistani nuclear weapons tested on May 28, 1998 reportedly had yields of approximately ten kilotons each. Fed’n of Am. Scientists, Pakistan Nuclear Weapons (2002), http://www.fas.org/nuke/guide/pakistan/nuke.


4. President Kennedy stated as follows at a press conference on March 21, 1963: “I am haunted by the feeling that by 1970, unless we are successful there may be ten nuclear powers . . . and by 1975, fifteen or twenty.” Richard Reeves, President Kennedy: Profile of Power 477 (1993) (quoting Public Papers of the Presidents of the United States: John F. Kennedy, Containing the Public Messages, Speeches, and Statements of the President, January 20 to November 22, 1963 280 (1963)).

5. The additional state was India, which detonated a single nuclear explosive device in 1974. George Perkovich, India’s Nuclear Bomb 178 (1999). Britain, China, France, the Soviet Union, and the United States all had manufactured and exploded a nuclear weapon prior to January 1, 1967, and were thus admitted to the NPT as “nuclear-weapon states.” Israel is a unique case in that it manufactured nuclear weapons during the 1960s, before the NPT opened for signature, but it still has not announced its nuclear arsenal, either by way of a detonation or a public declaration, and it has never joined the NPT. See Avner Cohen, Israel and the Bomb 273–76 (1998) (noting that Israel had a deliverable nuclear weapon capacity in June 1967, more than a year before the NPT was opened for signature and more than two years before the NPT entered into force); William J. Broad & David E. Sanger, Fraying of Old Restraints Risks a Second Nuclear Age, N.Y. Times, Oct. 15, 2006, at A11 (noting “Israel had the bomb by 1967”); Michael Karpin, The Bomb in the Basement X (2006).


8. At the end of 1995, two other major countries—Brazil and Cuba—also still had not joined the NPT. Brazil joined in 1998 and Cuba in 2002. See id.
members induced North Korea to remain within the treaty after it threatened to withdraw in 1993. A rigorous international inspections regime begun in 1991 kept Iraq’s nuclear weapons program in check. Belarus, Kazakhstan, and Ukraine found themselves with nuclear weapons on their territory when the Soviet Union collapsed but chose in the early 1990s to transfer the weapons to Russia and join the NPT as non-nuclear weapons states.

In January 1992, the Security Council announced that “the proliferation of all weapons of mass destruction constitutes a threat to international peace and security” and that the Council members “commit themselves to working to prevent the spread of technology related to the research for or production of such weapons and to take appropriate action to that end.” “Threat” to “international peace and security” is the threshold legal test for exercise of the Council’s sanctions authority under Chapter VII of its Charter. By equating nuclear proliferation with a “threat to international peace and security,” the Council put potential nuclear proliferators on notice that the Council deemed itself legally authorized to sanction any proliferant activity, regardless of whether or not that activity violates the NPT or any other legal instrument.

By May 1995, when an NPT Review Conference voted to extend the treaty in perpetuity, a robust nuclear nonproliferation regime had arisen.

9. *See infra* Section IV.B.
10. *See infra* Section V.A.
13. *See infra* Section III.B.
14. *See infra* Section III.B.
15. This step was taken pursuant to NPT Article X, paragraph 2, which provides:

Twenty-five years after the entry into force of the Treaty, a conference shall be convened to decide whether the Treaty shall continue in force indefinitely, or shall be extended for an additional fixed period or periods. This decision shall be taken by a majority of the Parties to the Treaty.
consisting of a vibrant NPT, several related multilateral treaties,\(^6\) arguably a customary international legal norm of nonproliferation,\(^7\) and the Security Council's notice that it had legal authority to take action against any nuclear proliferation activity. This regime, with the NPT at its forefront, seemed to have succeeded in converting the acquisition of nuclear weapons from an act of national pride into an act of international outlawry.\(^8\)

The last ten years have been less successful for the nuclear nonproliferation regime, which by now has lost much of its capacity to hinder proliferation.\(^9\) The UN Secretary-General's High-level Panel on Threats, Challenges and Change recently warned of "the erosion and possible collapse of the whole [nuclear nonproliferation] Treaty regime," explaining: "We are approaching a point at which the erosion of the nonproliferation regime could become irreversible and result in a cascade of proliferation."\(^10\)

The first major step in the decline of the nuclear nonproliferation regime involved a set of Indian and Pakistani nuclear weapons detonations in 1998.\(^21\) Although India and Pakistan were not parties to the NPT, their flagrant proliferation, and the world's weak response, shook the NPT and did considerable damage to the nuclear nonproliferation regime.\(^22\) In 2003, North Korea announced both that it was withdrawing from the NPT and that it possessed nuclear weapons.\(^23\) The Security Council failed to respond to either announcement.\(^24\) In October 2006, North Korea took another step toward a nuclear arsenal by detonating a nuclear weapon.\(^25\) The Security Council responded with weaker sanctions than it had previously imposed in response to lesser threats to international peace and security.\(^26\) In June 2003, the Director General of the

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See NPT, supra note 3, art. X, ¶ 2.
16. See infra Part I.
17. See infra Part I.
21. See infra Section IV.D.
22. See infra Section IV.D.
23. See infra Section IV.B.
24. See infra Section IV.B.
25. See Evan Ramstad, Jay Solomon & Gordon Fairclough, North Korean Claim of Test Imperils Nuclear-Control Effort, WALL ST. J., Oct. 10, 2006, at 1; infra Section IV.B.
26. See infra Section IV.B.
International Atomic Energy Agency (IAEA) determined that Iran had violated its NPT safeguards agreement.\textsuperscript{27} For more than three years thereafter, the Security Council stood mute while Iran failed to redress those violations and refused to take various steps required by the IAEA Board of Governors.\textsuperscript{28} The sanctions the Security Council finally imposed on Iran in December 2006 and March 2007 were among the weakest it had ever enacted.\textsuperscript{29}

Today, the risk of a nuclear 9/11 is high and rising. Graham Allison, U.S. Assistant Secretary of Defense during the Clinton administration and former dean of Harvard’s Kennedy School of Government, wrote in 2004 that “on the current path, a nuclear terrorist attack on America in the decade ahead is more likely than not.”\textsuperscript{30} Robert Gallucci, the Dean of the Georgetown University School of Foreign Service who led U.S. negotiations with North Korea during the Clinton administration, estimated in September 2006 that “it is more likely than not that al Qaeda or one of its affiliates will detonate a nuclear weapon in a U.S. city within the next five to ten years.”\textsuperscript{31}

Two regimes which are hostile to the West and exceptionally comfortable with civilian deaths—the totalitarian North Korean regime\textsuperscript{32} and

\begin{itemize}
  \item \textsuperscript{27} Int’l Atomic Energy Agency [IAEA], Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran, Report by the Director General, at 7, IAEA Doc. GOV/2003/40 (June 6, 2003) [hereinafter IAEA DG Report of June 6, 2003] ("Iran has failed to meet its obligations under its Safeguards Agreement with respect to the reporting of nuclear material, the subsequent processing and use of that material and the declaration of facilities where the material was stored and processed.").
  \item \textsuperscript{28} See, e.g., IAEA, Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran, Report by the Director General, at 19–20, IAEA Doc. GOV/2004/83 (Nov. 15, 2004) (noting that “it is clear that Iran has failed in a number of instances over an extended period of time to meet its obligations under its Safeguards Agreement with respect to the reporting of nuclear materials, its processing and its use, as well as the declaration of facilities where such material has been processed and stored,” and listing fifteen different failures by Iran to meet its obligations under its NPT Safeguards Agreement); IAEA, Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran, Report by the Director General, IAEA Doc. GOV/2006/53 (Aug. 31, 2006) [hereinafter IAEA DG Report of Aug. 31, 2006] (describing continued Iranian noncompliance with steps required by the Board of Governors and UN Security Council).
  \item \textsuperscript{29} See infra Section IV.C.
  \item \textsuperscript{30} GRAHAM ALLISON, NUCLEAR TERRORISM: THE ULTIMATE PREVENTABLE CATAS
  \item \textsuperscript{31} See, e.g., FREEDOM HOUSE, FREEDOM IN THE WORLD COUNTRY REPORT: NORTH KOREA (2005), available at http://www.freedomhouse.org/template.cfm?page=22&year=2005&country=6767 (stating that North Korea is “one of the most tightly controlled countries in the world” and “the regime denies North Koreans even the most basic rights”). During the 1990s, a period when the North Korean government was investing heavily in its nuclear weapons program, an estimated one million North Koreans died from famine. See, e.g., HUMAN
the terrorist-supporting Iranian regime—are well on their way to developing nuclear arsenals capable of use against a U.S. or other Western city. North Korea has tested a nuclear weapon and is estimated to possess sufficient plutonium for six to eight additional atomic bombs, and Iran continues to defy efforts to stall development of its nuclear arsenal.

North Korea’s nuclear weapons program raises several concerns, including fear that the unpredictable North Korean regime may attempt to blackmail its neighbors or the United States with threats of nuclear attack, or even use nuclear weapons against them. Perhaps the foremost concern currently is that North Korea may sell a nuclear weapon to a terrorist group or rogue state. The North Korean regime on several occasions has expressed willingness to sell nuclear weapons to the highest bidder, and it reportedly sold processed uranium to Libya and missiles to Iran, Syria, and Libya. William J. Perry, U.S. Secretary of Defense during the Clinton administration, wrote in September 2006:


34. See, e.g., LARRY A. NIKSCH, CONG. RESEARCH SERV., CRS REPORT FOR CONGRESS: NORTH KOREA’S NUCLEAR WEAPONS DEVELOPMENT AND DIPLOMACY 1 (2007).

35. See infra Section IV.C.

36. See Glenn Kessler & John Pomfret, North Korea’s Threats a Dilemma for China; Ally’s Nuclear Gamesmanship Ranksles Beijing, WASH. POST, Apr. 26, 2003, at A1; David E. Sanger, A Strategic Jolt, N.Y. TIMES, Oct. 10, 2006, at A1 (“North Korea . . . has never developed a weapons system it did not ultimately sell on the world market, and it has periodically threatened to sell its nuclear technology.”).

37. North Korea reportedly provided Libya in 2001 with nearly two tons of uranium processed into a gas that can be fed into centrifuges for enrichment into bomb fuel. David E. Sanger & William J. Broad, Evidence is Cited Linking Koreans to Libyan Uranium, N.Y. TIMES, May 23, 2004, at A1; Broad, supra note 33, at F1.

38. See Nuclear Threat Initiative, Ctr. for Nonproliferation Studies, North Korea Profile: Missile Exports (July 2003), http://www.nti.org/e_research/profiles/NK/Missile/66_1279.html; Thom Shanker, Russia Was Leader in Arms Sales to Developing World in ’05, N.Y. TIMES, Oct. 29, 2006, at A12 (“North Korea . . . shipped about 40 ballistic missiles to other nations in the four-year period ending in 2005, the only nation to have done so.”).
The growing nuclear arsenal in North Korea is a security disaster ... the overriding reason is the possibility that a North Korean nuclear bomb will end up in one of our cities, not delivered by a missile, but by a truck or freighter . . . . [W]e must take seriously the consequences of . . . a terror group gaining access to nuclear weapons, and the only plausible avenue for doing so is to buy or steal them from a nuclear power. If North Korea proceeds unchecked with building its nuclear arsenal, the risk of nuclear terrorism increases significantly.39

Iran's pursuit of nuclear weapons also raises several concerns. A nuclear umbrella might embolden Iran to step up its already aggressive support for terrorism, and an Iranian nuclear arsenal seems likely to spur proliferation by its neighbors. In addition, some have raised concerns that Iran's leadership, or rogue elements able to transfer nuclear arms to Iran's terrorist allies, might welcome a nuclear war as a means of achieving their goal of wiping the United States and Israel off the map.40 While mutual deterrence kept the United States and the Soviet Union from attacking each other during the Cold War,41 some in Iran might be

40. See Iranian Leader: Wipe Out Israel, CNN.COM, Oct. 27, 2005, http://www.cnn.com/2005/WORLD/meast/10/26/ahmadinejad/index.html (quoting Iranian President Mahmoud Ahmadinejad as saying, "God willing, with the force of God behind it, we shall soon experience a world without the United States and Zionism."); Iran: Tehran's Nuclear Recklessness and the U.S. Response, Hearing before the Subcomm. on Fed. Fin. Mgmt., Gov't Info. & Int'l Sec. of the S. Comm. on Homeland Sec. & Governmental Affairs, 109th Cong. (2005) (testimony of former CIA Director R. James Woolsey) (including the following quote from Hassan Abbassi, chief strategist for Iranian President Ahmadinejad: "We have a strategy drawn up for the destruction of Anglo-Saxon civilization."); Yossi Verter, Aznar: Khamenei Said in 2001 Iran Aimed to 'Set Israel Alight', HAARETZ, Mar. 15, 2006, available at http://www.haaretz.com/hasen/objects/pages/PrintArticleEn.jhtml?itemNo=694562 (former Spanish Prime Minister Aznar reported that Iran's current Supreme Leader, Ayatollah Khamenei, told him in a meeting that "Iran must declare war on Israel and the United States until they are completely destroyed."); Iran: Rafsanjani warns of high cost of US support for Israel, BBC WORLDWIDE MONITORING, Dec. 15, 2001 (documenting a speech by Ali Akbar Hashemi Rafsanjani, former Iranian President and current Expediency Council Chair, at Tehran University December 14, 2001, that included the following statement: "the use of even one nuclear bomb inside Israel will destroy everything. However, it will only harm the Islamic world. It is not irrational to contemplate such an eventuality."); see also An Apocalyptic Religious Zealot Takes on the World, SPIEGEL ONLINE, May 30, 2006, http://service.spiegel.de/cache/international/spiegel/0,1518,418691,00.html; Amir Taheri, The Frightening Truth of Why Iran Wants a Bomb, SUNDAY TELEGRAPH (London), Apr. 16, 2006, at 22 ("Ahmadinejad . . . boasts that the [Hidden] Imam gave him the presidency for a single task: provoking a 'clash of civilizations' in which the Muslim world, led by Iran, takes on the 'infidel' West, led by the United States, and defeats it . . . .").
41. But cf. Scott D. Sagan, How to Keep the Bomb from Iran, FOREIGN AFF., Sept.–Oct. 2006, at 45, 46 ("Although deterrence did work with the Soviet Union and China, there were
Despite these concerns, the international community continues to respond with remarkable passivity as the North Korean and Iranian nuclear weapons programs proceed and the nuclear nonproliferation regime nears collapse.

What has caused this dangerous decline of the nuclear nonproliferation regime and what can be done to save it?

Nuclear nonproliferation scholarship has thus far focused largely on the choices made by proliferators and somewhat on the content of nuclear nonproliferation norms, but it has largely ignored the choices made by those states in a position to enforce the norms and otherwise prevent proliferation. It is as if domestic criminal law scholarship were to focus mostly on decisionmaking by criminals, somewhat on the behavior criminal law prohibits, and little or not at all on the investigative authority, charging discretion, and sentencing decisions of police, prosecutors, and judges. For example, the literature contains several excellent studies of why and how individual countries have engaged in nuclear proliferation. There are also several excellent comparative analyses of why various countries have chosen to give up nuclear weapons programs.

None of these studies adopts a legal perspective, however, and few, if any, compare or attempt to draw lessons from the international community’s set of responses to proliferation by India and Pakistan, North Korea, Iran, Iraq, and Libya.

This Article analyzes from a legal perspective the responses of the international community, and especially the Security Council, to these examples of nuclear proliferation and the impact of those responses on the vitality of the nuclear nonproliferation regime. In doing so, the Article identifies and focuses on two key, interrelated themes. The first theme is the effect on these responses of the NPT’s remarkably weak
mechanisms for detecting violations of NPT obligations. The second theme is the frequent strong reluctance of the international community, including the Security Council, to impose serious sanctions for proliferation activity when it does come to light.

Part I provides an overview of the NPT and the obligations it imposes on state parties. Part II analyzes the verification weaknesses of the NPT. Part III introduces sanctions, including a delineation of what sanctions can potentially accomplish and a description of the sanctions authority and practice of the Security Council. Part IV examines the three most salient examples (North Korea, Iran, and India/Pakistan) of the international community's reluctance to impose sanctions for violations of the nuclear nonproliferation regime. Part V examines three instances in which sanctions, or the prospect of sanctions, contributed to stopping or slowing the progress of a country's nuclear weapons program. The first example is Iraq, where UN sanctions prevented Saddam Hussein from reconstituting his nuclear weapons program following the 1991 Gulf War. The second example is Libya, which was influenced by sanctions to dismantle its nuclear weapons program in 2003. The third example is India, where the prospect of sanctions played a crucial role in deterring nuclear weapons testing between 1974 and 1998. Part VI draws lessons from these six case studies and suggests several measures which could help save the nuclear nonproliferation regime by increasing its capacity to deter violations.

I. NPT Overview

The NPT—the international agreement at the heart of the nuclear nonproliferation regime—represents a grand bargain struck between

two groups of states: the five states (China, France, Russia, the United Kingdom, and the United States) that had manufactured and exploded a nuclear device prior to January 1, 1967 (nuclear-weapon states, or NWSs), and states that had not manufactured and exploded a nuclear device by that date (non-nuclear-weapon states, or NNWSs). The three basic elements of the bargain involve nonproliferation, the sharing and development of nuclear energy technology for peaceful purposes, and disarmament.

NPT Articles I through III contain the key nonproliferation commitments. In Article I, each NWS undertakes not to transfer nuclear weapons "to any recipient whatsoever" and "not in any way to assist, encourage, or induce" any NNWS "to manufacture or otherwise acquire nuclear weapons." In Article II, each NNWS undertakes "not to manufacture or otherwise acquire nuclear weapons" and "not to seek or receive any assistance in the manufacture" of such weapons. In Article III, each NNWS undertakes to conclude a safeguards agreement with the IAEA "for the exclusive purpose of verification of the fulfillment of its obligations" under the NPT.

Article IV contains the principal commitments related to the development and sharing of nuclear technology for peaceful purposes. Article IV, paragraph 1 provides that "[n]othing in this Treaty shall be interpreted as affecting the inalienable right of all the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with articles I and II of this Treaty." Paragraph 2 provides that all parties to the NPT "undertake to facilitate, and have the right to participate in, the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy."

Article VI contains the key commitments related to disarmament, providing as follows: "Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a Treaty on general and complete disarmament under strict and effective international control."

47. NPT, supra note 3, art. IX.
48. Id. art. I.
49. Id. art. II
50. Id. art. III.
51. Id. art. IV, para. 1.
52. Id. art. IV, para. 2.
53. Id. art. VI.
Article X specifies that each party has "the right to withdraw from the Treaty if it decides that extraordinary events, related to the subject matter of this Treaty, have jeopardized the supreme interests of its country." Notice must be given to the other parties and to the Security Council three months in advance of withdrawal, and shall include a "statement of the extraordinary events" the withdrawing state regards as having jeopardized its "supreme interests."5

The nuclear nonproliferation regime's success in its heyday led several experts to argue that nuclear nonproliferation had evolved into binding customary international law. David Koplow wrote in 1993 that "it is possible to argue that the norm of nuclear non-proliferation is now so well-established that it has evolved into a binding facet of customary international law, enveloping even non-parties and providing an independent source of authority even if the treaty itself were to succumb."

Thomas Graham, Jr., who served for fifteen years as general counsel of the U.S. Arms Control and Disarmament Agency (ACDA) and led the U.S. government's successful efforts to extend indefinitely the NPT in 1995, described the era prior to the 1998 Indian and Pakistani tests as follows:

[D]espite the Indian test [of 1974] and the refusal of India, Israel and Pakistan to join the treaty, an international norm of behavior developed establishing that: the number of nuclear-weapon states, as defined by international agreement, would remain at five; that all other parties would be pledged to not acquire nuclear weapons; and that three states [Israel, India, and Pakistan] in an ambiguous status would be tolerated outside the NPT regime.57

George Bunn, the first ACDA general counsel, accused India and Pakistan, in the wake of their 1998 nuclear tests, of having "violated a global norm against any more countries with nuclear weapons."58

Is nuclear nonproliferation customary international law today? Customary international law is commonly described as law that results from a general and consistent practice of states followed by them out of a

54. Id. art. X.
55. Id.
sense of legal obligation. 59 State practice in the early 1990s, and indeed still today, manifests more compliance with the nuclear nonproliferation regime than with many of the most widely recognized customary international law norms. 60 In a 1996 opinion on the legality of the threat or use of nuclear weapons, 61 however, the ICJ undercut the argument that nuclear nonproliferation has evolved into a binding norm of customary international law. The ICJ held, by eleven votes to three, that “[t]here is in neither customary nor conventional international law any comprehensive and universal prohibition of the threat or use of nuclear weapons as such.” 62 By seven votes to seven, a tie broken by the vote of the ICJ President, the Court held that while “the threat or use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict,” nevertheless, the Court could not “conclude definitively whether the threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defence, in which the very survival of a State would be at stake.” 63

If customary international law did not in 1996 prohibit in all circumstances the threat or use of nuclear weapons, it surely did not prohibit their possession, and if nuclear nonproliferation was not customary international law in 1996, it is hard to imagine that it is

60. For example, the prohibitions on slavery, genocide, and torture are among the most commonly listed examples of jus cogens (peremptory norms of general international law). See, e.g., Sosa v. Alvarez-Machain, 542 U.S. 692, 762 (2004) (Breyer, J., concurring); ANTHONY AUST, MODERN TREATY LAW AND PRACTICE 257-58 (2000); BARRY E. CARTER, PHILLIP R. TRIMBLE & CURTIS A. BRADLEY, INTERNATIONAL LAW 107-09, 126 (4th ed. 2003). There are, however, an estimated twenty-seven million slaves worldwide. See Andrew Cockburn, 21st-Century Slaves, NAT’L GEOGRAPHIC, Sept. 2003, at 2, available at http://magma.nationalgeographic.com/ngm/0309/feature1. Iranian President Ahmadinejad has recently advocated the genocidal destruction of Israel (see supra note 40), and genocide continues to be perpetrated in Sudan (see, e.g., Glenn Kessler & Colum Lynch, U.S. Calls Killings in Sudan Genocide, WASH. POST, Sept. 10, 2004, at A1), in both cases with relatively little interference by the international community. Amnesty International in 2004 claimed that 132 countries “engage in torture and ill treatment of prisoners.” War on Terror Called War on Rights, CBS NEWS, May 26, 2004, http://www.cbsnews.com/stories/2004/05/26/world/main619714.shtml. With just three significant nonparties to the NPT prior to North Korea’s defection, no new nuclear-weapons-possessing states in the twenty-four years prior to the 1998 South Asian detonations, and only one new nuclear-weapons-possessing state since 1998 (North Korea in 2006), nuclear nonproliferation is thus, despite its present challenges, currently enjoying better compliance than most if not all of these jus cogens prohibitions.
61. Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226 (July 8).
62. Id. at para. 105.
63. Id.
customary international law today. However, the Security Council has deemed nuclear proliferation to be a “threat to international peace and security,” and thus nuclear proliferation is subject to its Chapter VII sanctioning authority regardless of whether or not the proliferation activity violates the NPT, another treaty, or customary international law. The rest of this Article examines the international community’s use of the tools legally available to it to detect and sanction the proliferation of nuclear weapons. The Article aims to shed light on the practice of the international community in the use of these tools and, hopefully, contribute to their effectiveness and enhancement.

II. THE NPT’S VERIFICATION WEAKNESSES

The NPT’s verification weaknesses are a function of the NPT’s history, the overlaps between military and civilian nuclear technology, and the tensions between the nonproliferation and “peaceful use” provisions of the NPT. The NPT and its principal verification tool, the safeguards agreement, were developed in the 1960s and 1970s, when the technology for constructing a nuclear weapon was not widely available and the greatest proliferation risks were thought to be from technologically advanced “countries like Germany and Sweden, democratic states that were fairly open.” With such countries, it was relatively easy to both trust and verify.

Today, more than sixty years after the Hiroshima and Nagasaki detonations, detailed descriptions of how to construct a nuclear weapon are widely available, including over the Internet. It is relatively easy to create every part of a nuclear weapon except the weapons-grade fissile material—highly enriched uranium (HEU) or plutonium—at the weapon’s core. From a technological perspective, then, only the acquisition of weapons-grade fissile material stands between most states (and sophisticated terrorist groups) and manufacturing a nuclear weapon.

64. One would presumably have to rely on the Security Council and other condemnations of the Indian, Pakistani, and North Korean nuclear tests and the Iranian nuclear program as representing a kind of opinio juris.
66. See ALLISON, supra note 30, at 93.
67. Id. at 93–95.
Civilian nuclear power technology and the nuclear technology needed to develop weapons-grade fissile material overlap considerably. Any nuclear power program that operates fully independently (with a “full fuel cycle”) includes technology readily adaptable to the production of weapons-grade fissile material. The fuel cycle stages most readily adaptable to producing such material are the enrichment and reprocessing stages. Yet, under NPT Article IV as currently interpreted, state parties (including NNWSs) are not prohibited from possessing enrichment or reprocessing technology, or even weapons-grade nuclear material, so long as the technology and material are “for peaceful purposes” and “in conformity with articles I and II” of the NPT. As IAEA Director General El Baradei puts it: “under the current regime . . . there is nothing illicit in a non-nuclear-weapon state having enrichment or reprocessing technology, or possessing weapon-grade nuclear material.”

The overlap between civilian and military nuclear technologies poses perhaps the most significant challenge facing the nuclear nonproliferation regime: the ease with which a state—in the guise of conducting a peaceful nuclear weapons program—can acquire either weapons-grade fissile material or the technologies necessary for its production.

Article X provides each state party the right to withdraw from the NPT at its own discretion. Therefore, once a state bent on developing nuclear weapons has acquired the requisite material or technologies, it can withdraw from the NPT and quickly proceed to construct a nuclear bomb. Alternatively, a state progressing towards developing nuclear weapons might decide to remain within the NPT in order to further advance its weapons program clandestinely.

The NPT’s principal tool for detecting cheating by member states on their nonproliferation obligations is the safeguards agreement, which Article III requires each NNWS to conclude with the IAEA for the purpose of “verification of the fulfillment of its obligations assumed under this Treaty with a view to preventing diversion of nuclear energy from

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71. Per El Baradei: “Should a state with a fully developed fuel-cycle capability decide, for whatever reason, to break away from its non-proliferation commitments, most experts believe it could produce a nuclear weapon within a matter of months.” Id.
72. A state may prefer this “cheating” approach for two related reasons: 1) putting off as long as possible any anti-proliferation pressures that its withdrawal from the NPT might elicit, and 2) continuing to benefit from nuclear technology trade within the NPT framework.
peaceful uses to nuclear weapons." The IAEA's model for this safeguards agreement is contained in an IAEA document usually referred to as INFCIRC/153.73 The safeguards agreements for individual states, commonly known as "INFCIRC/153 safeguards agreements," have rarely deviated from the model.

Under INFCIRC/153 safeguards agreements, parties must report to the IAEA on their nuclear facilities and the nuclear material that moves through them.74 The INFCIRC/153 agreements are significantly flawed, however, in that they contain no effective mechanism for the IAEA to assess whether the reports are complete.75 The agreements operate on the assumption that all states declare all relevant facilities and materials.76 The lack of IAEA verification authority under the INFCIRC/153 agreements is compounded by the fact that neither the INFCIRC/153 agreements, the NPT, nor international law in general provide specific penalties for lying to international organizations. The international community's failure to detect the Iraqi nuclear weapons program in the 1980s demonstrated the verification weaknesses of the INFCIRC/153 safeguards agreements. According to Pierre Goldschmidt, former Deputy Director General of the IAEA, in 1991 "the world discovered that Iraq had been developing over more than a decade, a secret nuclear weapon programme completely separate from its civil nuclear programme declared to and inspected by the IAEA."77

The verification shortcomings prompted the IAEA to issue a model protocol in 1997 to be appended to the INFCIRC/153 agreements (the Additional Protocol).78 The Additional Protocol expands the IAEA's access rights and requires parties to submit a broader range of information to the IAEA about their nuclear programs.79 As the IAEA explained:

73. IAEA, The Structure and Content of Agreements Between the Agency and States Required in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons, IAEA Doc. INFCIRC/153 (Corrected) (June 1972).

74. See IAEA, IAEA Safeguards: Stemming the Spread of Nuclear Weapons, available at www.iaea.org/Publications/Factsheets/English/S1_Safeguards.pdf [hereinafter IAEA Safeguards Fact Sheet]; see also Ephraim Asculai, Rethinking the Nuclear Nonproliferation Regime, 70 JAFFEE CRT. FOR STRATEGIC STUD. 1, 30-31 (2004).

75. Asculai, supra note 74, at 31.

76. Id.


78. IAEA Safeguards Fact Sheet, supra note 74; Asculai, supra note 74, at 31; IAEA, Model Protocol Addition to the Agreement(s) Between State(s) and the International Atomic Energy Agency for the Application of Safeguards, IAEA Doc. INFCIRC/540 (corrected) (Sept. 1997).

79. See IAEA Safeguards Fact Sheet, supra note 74.
“While the chief object of safeguards under INFCIRC/153 is to verify that declared nuclear material was not diverted, the chief object of the new measures . . . is to obtain assurance that the State has no undeclared activities.”80 The IAEA did not make adherence to the Additional Protocol mandatory for NPT members,81 however, and 121 of the 189 NPT member states, including many states of proliferation concern, have yet to join.82

One NPT state party which has refused to adhere to the Additional Protocol is Iran. As the IAEA discovered in 2002 through a tip from a dissident group, Iran “concealed a considerable number of nuclear facilities, materials and activities” from the IAEA for eighteen years in violation of Iran’s NPT safeguards obligations.83 According to Goldschmidt, “[a]s it stands, the investigating authority of the agency is too limited with regard to Iran. To do its job properly it needs to have more authority than is currently available to it.”84

The IAEA’s long failure to detect Libya’s nuclear weapons program also illustrates the weaknesses of the IAEA’s standard verification regime. Libya became an NPT party in 1975,85 but it did not adhere to the Additional Protocol until 2006.86 Until late 2003, Libyan officials

81. For a compelling argument that the NPT could have been interpreted to make the Additional Protocol compulsory for all NPT members, see George Bunn, Inspection for Clandestine Nuclear Activities: Does the Nuclear Non-Proliferation Treaty Provide Legal Authority for the International Atomic Energy Agency’s Proposals for Reform?, NUCLEAR L. BULL., June 1996, at 9.
83. Goldschmidt, supra note 77, at 5.
84. Con Coughlin, UN Inspectors “Powerless to Stop Atom Bomb Plans in Iran”, SUNDAY TELEGRAPH (London), Nov. 9, 2005, at 25. With respect to Iran, the IAEA now believes that even the Additional Protocol would be insufficient to ensure the absence of a nuclear weapons program. The IAEA Director General recently stated as follows:

Without full transparency that extends beyond the formal legal requirements of the Safeguards Agreement and Additional Protocol . . . the Agency’s ability to . . . verify the correctness and completeness of the statements made by Iran, particularly with regard to its centrifuge enrichment programme, will be limited . . . .

85. See United Nations, Status, supra note 7.
86. IAEA, Strengthened Safeguards System, supra note 82.
insisted that their nuclear research was "aimed at developing a domestic nuclear power industry." 87 Earlier that year, Libyan leader Muammar Qaddafi 88 denied any interest in the possession of nuclear weapons, claiming "they are of no use to us, and we don't have enough money to manufacture weapons of mass destruction." 89 But in December 2003, under pressure from sanctions imposed by the United States, the Libyan government admitted that it had been pursuing a nuclear weapons program and agreed to dismantle it. 90 Libya opened the program to international inspectors, who found it "unexpectedly advanced." 91 Contrary to its NPT obligations, Libya for more than a decade had failed to report required developments to the IAEA. 92 "Our experience with Libya shows," stated Goldschmidt, "that it is almost impossible for the agency to decide whether a country's nuclear intentions are peaceful or otherwise . . . . If the Libyans had not admitted [that they were trying to build a nuclear bomb], we would not have been able to prove it." 93

The overlaps between military and civilian nuclear technology, tensions between nonproliferation and "peaceful use" provisions of the NPT, and safeguards agreement weaknesses combine to make it very difficult to demonstrate definitively that a country is pursuing a non-peaceful nuclear program. "In hindsight," wrote IAEA Director General El Baradei, "a number of the premises of the [NPT] seem less than optimal . . . . [I]t relied on the promise of the signatories to use nuclear materials for peaceful purposes only." 94 Unfortunately, that reliance largely continues to this day.

III. INTRODUCTION TO SANCTIONS

Parts IV and V of this Article examine case studies of the international community's responses to nuclear proliferation and the pivotal

87. Coughlin, supra note 84.
88. There is no standardized way to spell the last name of Libya's dictator. The Washington Post spells it "Gaddafi," the Wall Street Journal spells it "Gadhafi," and the New York Times spells it "Qaddafi." This Article adopts the New York Times' spelling but retains the original spellings in all quotes.
90. See infra Section V.B.
93. Coughlin, supra note 84.
94. El Baradei, supra note 70.
impact of those responses on the vitality of the nuclear nonproliferation regime. In order to fully understand the international community’s choices, however, it is essential first to understand the full range of the international community’s sanctioning options. This Part sets the stage for the rest of the Article, beginning with a general discussion of the purposes of sanctions, and then turning to the specific sanctioning authorities and practices of the UN Security Council.

Policymakers have four primary tools for responding to proliferant or other objectionable behavior on the international plane: statements, soldiers (military force), and two middle options: economic sanctions and positive incentives. While Parts IV and V will consider all of these tools in assessing the international community’s responses to nuclear proliferation, this Article focuses primarily on economic sanctions. Mere condemnatory statements are unlikely to have a meaningful impact on objectionable behavior, especially when the stakes are as high as with nuclear proliferation. In contrast, while the application of overpowering military force can end most objectionable behavior, the recent U.S. experience in Iraq has reminded us that the cost of military action can be high and the consequences uncertain.

Positive incentives run the risk of creating moral hazards. For example, offering a benefit to a noncompliant state in exchange for its compliance—a benefit not available to a similarly situated compliant state—can encourage noncompliance. Positive incentives should therefore only be offered in exchange for commensurate concessions by the target state. These could include 1) in exchange for commensurate compliance, lifting sanctions that were imposed on the noncompliant state as a consequence of its noncompliance (Part VI discusses how this was done with Libya); or 2) in exchange for concessions that go beyond the target’s legal obligations or other baseline of acceptable international behavior, providing incentives that go beyond what is available to similarly situated states that have remained compliant or otherwise within the bounds of acceptable behavior (Part IV discusses how this was done with North Korea). The prospect of a complete lifting of sanctions in exchange for compliance can be a powerful incentive. Rewarding partial compliance with a partial easing of sanctions can also have a useful role, by building mutual confidence and encouraging a bargaining process which will lead to further concessions.95

95. See David Cortright & George A. Lopez, Introduction: Assessing Smart Sanctions: Lessons from the 1990s, in SMART SANCTIONS: TARGETING ECONOMIC STATECRAFT 1, 16 (David Cortright & George A. Lopez eds., 2002).
Sanctions may be imposed unilaterally, by an ad hoc coalition of states, by a regional organization such as the European Union, or by the Security Council. The entity imposing the sanctions is often referred to as the “sender,” and the entity upon which the sanctions are imposed is often labeled the “target.” Senders are often authorized by law to impose sanctions only after a determination that such sanctions will advance certain specified goals. For example, as Section B.2 of this Part details, the UN Charter authorizes the Security Council to impose sanctions only if it determines that such measures are necessary to maintain or restore international peace and security. However, the legally mandated threshold rationales for sanctions are not always the sender’s sole or even primary motivations for imposing the sanctions. A realistic assessment of sanctions practice must take into account both the legally authorized rationales and the senders’ actual and potential goals. Scholarly assessments of the efficacy of sanctions often focus on only a few of the broad range of purposes for sanctions, therefore providing an incomplete picture of sanctions motivations and effectiveness. The following Section delineates a full list of potential sanctions goals, which are then applied in Part IV to assess the effectiveness of the sanctions imposed on North Korea and Iran by the Security Council.

A. Sanctions Goals

The major goals potentially served by the imposition of sanctions in the international arena include: coercion, containment, deterrence, paving the way politically for future stronger sanctions, creating a legal foundation upon which some senders will immediately be able to build additional stronger sanctions, retribution, and satisfying the sender’s domestic audience by “doing something.”

1. Coercing a Change in Target Behavior

Sanctions can be imposed for coercive purposes, such as forcing the target to withdraw from occupied territory, hand over suspects, or comply with nonproliferation measures. Sanctions contribute to the achievement of coercive foreign policy goals when the total costs imposed or threatened by the sanctions activity are higher than the costs the target expects to incur from complying with the sender’s demands. It is important to note that if the sender is demanding regime change, the tar-

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96. For example, Cortright and Lopez exclude from their analyses the role that sanctions can serve in deterring future wrongdoing. Id. at 7.
get leadership's costs of compliance are likely to be higher than the costs of defiance, and coercive sanctions are unlikely to succeed. It should also be noted that the use of the pain of sanctions to coerce target behavior tends to assume those subject to sanctions perceive their self-interest in Western capitalist terms (e.g., they value economic prosperity and physical pleasure). Alternate potential target state motivators, such as nationalism, religious conviction, and other ideologies that exalt martyrdom and suffering can raise the level of pain necessary to achieve coercion or even render coercion impossible.

2. Reducing or Containing Target Ability to Implement Objectionable Policies

The classic sanction designed to reduce or contain a target’s ability to implement objectionable policies is an arms or fuel embargo imposed on an aggressor. Another example is a restriction on the export of sensitive nuclear technologies to a target attempting to develop nuclear weapons. The idea is that regardless of whether the sanctions achieve other goals, such as coercively changing the target leadership’s plans, they will change its capabilities. Sanctions contribute to containment when they materially reduce the target’s supply of goods necessary to the implementation of the objectionable policies. The success of sanctions designed to contain target behavior depends on the target’s inability to produce or acquire substitute goods of an acceptable quality and comparable price.

3. Deterring Other Actors That Might Contemplate Objectionable Actions

Regardless of whether sanctions succeed in changing the target leadership’s intentions or capabilities, they can change the cost-benefit calculations of, and thus deter, other actors that might be contemplating objectionable activities. Sanctions contribute to achieving deterrence when such other actors, observing the imposition of sanctions on the target, increase their assessments of the likelihood or cost of sanctions being imposed on them if they engage in activities objectionable to the sender.

Sanctions may have an enhanced deterrent or “demonstration” effect on actors contemplating objectionable actions similar to those undertaken by the target. In this sense, sanctions imposed in response to a target violating a particular norm can be said to reaffirm that norm by

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98. *Id.* at 173.
helping deter future violations of it. Sanctions can also have a deterrent effect vis-à-vis unrelated potential actions objectionable to the sender.

Deterrent sanctions achieve their goals when the total estimated costs of the potential objectionable activity (the recalculated likelihood and cost of sanctions plus any other costs of the activity) are deemed by the potential actor to be higher than the value the potential actor expects to accrue from the activity. As with coercively focused sanctions, the deterrent use of sanctions tends to rely on the target perceiving its self-interest in Western capitalist terms and may be less applicable to actors motivated by nationalism, religious conviction, and other ideologies that exalt values including martyrdom and suffering.

4. Paving the Way Politically for Future Stronger Sanctions

In this variant, senders impose a relatively weak first set of sanctions with the view that even if this first set does not fully achieve its primary goal, such as changing the target leadership’s intentions or capabilities (or deterring other actors), it will help pave the way politically for future stronger sanctions more likely to fully achieve those goals. For example, a sender that believes the use of force will likely be required to end a target’s objectionable behavior may first impose economic sanctions on the target so as to ensure that the use of force not only is, but is also seen to be, a measure of last resort.

Thus, the intended audience for such a first set of sanctions is at least in part those whose political support would be sought for stronger sanctions (for example, other Security Council members or other potential senders or politically powerful entities in the sender’s own country that may be skeptical about imposing the stronger set of sanctions). A first set of sanctions that does not fully achieve its goals is likely to help build support for stronger sanctions when it is seen by some or all of this audience as implemented in good faith, effectively, and for a period of time sufficient for this first set of sanctions to take hold.

The use of a first set of sanctions to build support for future stronger sanctions assumes that irreversible harm, of a magnitude unbearable to the sender’s interests, will not occur while waiting for the first set of sanctions to run its course and the stronger set of sanctions to be approved and implemented. The risk of such an interim harm may lead a sender who would like, but is not dependent on, political support for stronger sanctions (e.g., a state that is willing to use force in the absence of Security Council authorization) to consider skipping this first set of sanctions, particularly if the sender is not certain that trying a first set would make a pivotal difference in garnering audience support.
5. Creating a Legal Foundation Upon Which Some Senders Can Immediately Build Additional Sanctions

Even if a set of sanctions does not fully achieve its primary goals, such as changing the target leadership’s intentions or capabilities (or deterring other actors), it may provide some senders with the requisite legal authority to immediately impose stronger sanctions more likely to achieve those goals. For example, the domestic laws of some UN member states make it difficult for their governments to impose sanctions in the absence of a UN Security Council sanctions resolution but make it relatively easy, once such a resolution exists, for those governments to impose sanctions broader than the resolution’s specific requirements.\textsuperscript{99}

Similarly, several UN member states, including the United States, have interpreted the specific measures required by Security Council resolutions as both a nonderogable minimum requirement of international law and as a “general grant” of international legal “authority to impose restrictions which may go beyond the terms of the relevant resolutions.”\textsuperscript{100} This can be critical when such additional sanctions might otherwise be deemed to violate sender obligations under another international agreement.

6. Imposing Retributive Punishment on the Target

The reasoning behind using sanctions to impose retributive punishment on international actors is analogous to the reasoning behind using sanctions to impose retributive punishment on domestic criminals. There are three major theories as to when retribution is achieved.\textsuperscript{101} Under the assaultive retribution variant, retribution is achieved when the criminal is made to suffer.\textsuperscript{102} Under the protective retribution variant, retribution is achieved when a criminal pays his debt to society by enduring punishment proportional to the crime committed.\textsuperscript{103} Under the victim vindication variant, retribution is achieved when the criminal receives punishment proportional to the offense to the victim.\textsuperscript{104} The idea of retribution as a motivation for sanctions in the international arena is that regardless of whether the sanctions achieve any other goals, they will at

\begin{itemize}
\item \textsuperscript{99} See infra Section IV.C (which discusses how this was a factor with respect to the December 2006 Security Council Iran sanctions resolution).
\item \textsuperscript{100} Gian Luca Burci, Senior Legal Officer, World Health Org., Address at the Lauterpacht Center for International Law: Legal Aspects of UN Economic Sanctions (Feb. 11, 2000), available at http://lcil.law.cam.ac.uk/Burci.doc.
\item \textsuperscript{101} See, e.g., Joshua Dressler, Understanding Criminal Law 17–18 (3d ed. 2001).
\item \textsuperscript{102} Id. at 17.
\item \textsuperscript{103} Id. at 17–18.
\item \textsuperscript{104} Id. at 18.
\end{itemize}
least impose that suffering, reclaim that debt, or enforce that proportional punishment.

In contrast with the use of international sanctions to coerce, contain, or deter, the use of sanctions to punish is only appropriate when the target's behavior is not only objectionable but also violates international law. As with coercively focused and deterrent sanctions, the retributive use of sanctions seems at least partially reliant on the actor sharing Western capitalist values. Suffering and proportional punishment devised from a Western perspective may not have the desired retributive impact when applied to actors motivated by nationalism, religious conviction, and other ideologies that exalt values including martyrdom and suffering.

7. Satisfying a Sender's Domestic Audience by “Doing Something”

Sanctions can also serve principally as "a steam valve to relieve [sender] governments from the pressure of their populace," with coercion, containment, and deterrence "of secondary concern."\(^5\) This is the only "non-substantive" sanctions goal, in that it does not seek to further substantively the repair or containment on the international plane of the harm done by the act that gave rise to the sanctions.

It is important to note in connection with the disparate sanctions purposes described above that the sender's goals for imposing a particular sanction often change over time. It is also important to note that even when a group of states acts together to impose sanctions, through the Security Council for example, each state may have different motivations for doing so. This can lead to disputes when evaluating whether sanctions should be modified or lifted in response to a concession by a target state or another development that may better satisfy one sending state's motivations than another's.\(^6\)

B. Sanctions Authority and Practice of the UN Security Council

1. Security Council Sanctions in Historical Perspective

More than one hundred sanctions regimes have been imposed by a variety of senders during the past one hundred years. The most comprehensive and still the most influential study of sanctions regime efficacy was produced by the Institute for International Economics (IIE), which

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examined 115 cases of economic sanctions, beginning with World War I and ending in 1989. The IIE's assessment of the efficacy of sanctions was quite pessimistic, as were a number of other scholarly assessments based on the pre-1990 sanctions record. However, the vast majority of the pre-1990s cases involved unilateral sanctions, which are, if enforced with equal rigor, inherently less effective than Security Council sanctions binding on all UN member states. In assessing the potential effectiveness of UN sanctions, this Article will therefore focus on the record of UN sanctions themselves.

Between the founding of the UN in 1945 and the end of the Cold War, the Security Council imposed mandatory economic sanctions against only two targets: a broad economic embargo against Rhodesia and an arms embargo against South Africa. Cold War tensions prevented agreement on sanctions in even exceptionally compelling cases. For example, following the seizure of the U.S. Embassy in Iran in November 1979, the Soviet Union vetoed a Security Council resolution calling for economic sanctions.

In 1990, with the Cold War ice broken, the United States and the Soviet Union together voted to impose comprehensive trade sanctions on Iraq in response to its occupation of Kuwait. Since then, the Security Council has adopted more than seventy sanctions resolutions in relation to at least fifteen target states.

2. The Security Council's Legal Authority to Impose Sanctions

a. Overview

The circumstances under which the Security Council may impose binding sanctions are set forth in Chapter VII of the UN Charter, which requires the Council to make three legally distinct determinations

108. See Kimberly Elliott, Economic Leverage and the North Korean Nuclear Crisis, 2003 INST. FOR INT'L ECON. 1, 3.
109. See Drezner, supra note 105, at 10–11.
in the course of imposing sanctions. First, the Council must determine
that there exists a “threat to the peace, breach of the peace, or act of ag-
gression.”\textsuperscript{117} Second, the Council has to “decide what measures shall be
taken . . . to maintain or restore international peace and security.”\textsuperscript{118} Third, the Council must decide what measures are “to be employed to
give effect to [the Council’s] decisions.”\textsuperscript{119} Article 41 provides an illustra-
tive list of “measures not involving the use of armed force” that may
be employed by the Security Council to give effect to its decisions.\textsuperscript{120} Article 42 provides an illustrative list of measures involving the use of
force that may be employed by the Security Council to give effect to its
decisions.\textsuperscript{121}

Articles 25 and 103 provide Security Council sanctions with legal
force. Article 25 provides that “the Members of the United Nations agree
to accept and carry out the decisions of the Security Council in accor-
dance with the present Charter.”\textsuperscript{122} Article 103 provides that “in the event
of a conflict between the obligations of the Members of the United Na-
tions under the present Charter and their obligations under any other
international agreement, their obligations under the present Charter shall
prevail.”\textsuperscript{123} In other words, Article 25 makes Council decisions binding
on all member states and Article 103 provides that compliance with such
decisions takes precedence over member obligations under any other
international agreement.

Article 103’s specification that Security Council decisions take
precedence over existing international law is consistent with Article 1(1),
which implies that the Council is bound to act, but only in certain cir-
cumstances, “in conformity with the principles of justice and
international law.”\textsuperscript{124} The reference to the principles of justice and inter-
national law only appears in the part of the paragraph that relates to the
peaceful settlement of disputes and situations under Chapter VI,\textsuperscript{125} and
thus does not apply to the binding measures taken by the Council under
Chapter VII to prevent or remove threats to the peace. According to one
expert on Charter history, “the rejection of such a provision stemmed
from concerns by the United States and others that when the Council

\begin{itemize}
\item \textsuperscript{117} U.N. Charter art. 39.
\item \textsuperscript{118} d.
\item \textsuperscript{119} d. art. 41.
\item \textsuperscript{120} d. In Charter parlance, “decision” is a term of art for binding measures imposed under the authority of Chapter VII.
\item \textsuperscript{121} d. art. 42.
\item \textsuperscript{122} d. art. 25.
\item \textsuperscript{123} d. art. 103.
\item \textsuperscript{124} d. art. 1, para. 1.
\item \textsuperscript{125} d.
\end{itemize}
acts under Chapter VII to respond to threats to the peace, it need not feel constrained by existing law.” As a result, the measures the Council imposes under Chapter VII need not be consistent with any existing non-Charter international law other than peremptory norms.

The rest of this subsection will analyze the language of, and practice under, each of the three determinations necessary to imposition of a sanction. By delineating the extraordinary breadth of the Security Council’s authority to impose sanctions, this analysis informs subsequent discussion of the Council’s reluctance to use more than a fraction of that authority to counter nuclear proliferation.

b. Determining The Existence of a Threat to the Peace, Breach of the Peace, or Act of Aggression

In order to impose binding sanctions under Chapter VII, the Council first must determine that there exists a “threat to the peace, breach of the peace, or act of aggression.” The Charter does not define what constitutes a threat to the peace. One prominent scholar opined that in practice this phrase has “come to mean whatever situations can command an affirmative vote of the Council.”

The Council has been willing to find a “threat to the peace” in the absence of existing or even imminent armed conflict, in the absence of a clear transnational element, and in the absence of any breach of international law. This was crystallized in a statement by the president of the Council at the conclusion of a special Council meeting held in 1992 at the level of heads of state and government. Speaking on behalf of the Council, the president declared that the “absence of war and military conflicts amongst States does not in itself ensure international peace and security,” that the “non-military sources of instability in the economic, social, humanitarian and ecological fields have become threats to peace and security,” and that the “proliferation of all weapons of mass destruction constitutes a threat to international peace and security.” As Hans Kelsen has pointed out, the purpose of enforcement action under Chapter VII “is not to maintain or restore the law, but to maintain or

127. Iran is therefore incorrect in arguing that its rights under the NPT take priority over the Security Council’s decision that it curtail its nuclear program. See infra Section IV.C.2.
129. See Lowenfeld, supra note 113, at 96.
130. The President of the Security Council, supra note 12.
restore peace, which is not necessarily identical with the law." Thus, if
an act of nuclear proliferation constitutes a threat to international peace
and security, the Security Council can sanction the proliferant regardless
of whether the act is a violation of the NPT or any other international
legal instrument.

c. Deciding What Measures Shall Be Taken to Maintain
or Restore International Peace and Security

The Council must next “decide what measures shall be taken . . . to
maintain or restore international peace and security.” These measures
typically involve actions by the target state to correct its objectionable
acts (for example, by reversing the acts or forfeiting any advantage
gained from them). The measures often involve the target state bringing
itself into compliance with preexisting legal obligations, but may also
require the target state to go beyond some preexisting legal obliga-
tions.

d. Deciding What Measures Are to Be Employed to
Give Effect to the Council’s Decisions

The third determination the Council must make in imposing sanc-
tions is a decision as to what measures are “to be employed to give effect
to [the Council’s] decisions.” These measures are typically economic
sanctions, the use of force, or other steps designed to coerce, contain, or
deter. The determination to impose such measures is sometimes made in
a later resolution, after it has become clear that the target state is not
complying with the measures specified by the Council as necessary to
maintain or restore international peace and security.

As the above analysis reflects, the Council is, as a matter of law,
vested with considerable but not complete discretion as to when, for
what purposes, and how it may deploy its sanctioning authority. In prac-
tice, that discretionary power is even greater. UN member states, acting
within the Security Council, “have carefully avoided recognizing that the
Council’s authority may be subject to limits.” According to Steven
Ratner, “the concern that the Council might act either beyond its powers

133. For an example of the latter, see the discussion at Section V.B., infra, of S.C. Res.
1718, supra note 12 (responding to North Korea’s nuclear test).
134. U.N. Charter art. 41.
135. See Burci, supra note 100, at 5.
136. See Bartram S. Brown, Book Reviews: UN Sanctions in International Law, 96 Am.
in the Charter or in violation of other norms of international law” is
“considered rather irrelevant by government officials and political scien-
tists.” Some scholars, including Erika de Wet, have argued that the
Council is not insulated from the possibility of acting ultra vires and in
fact regularly engages in illegal behavior. De Wet favors judicial re-
view of Council resolutions by the ICJ, but recognizes that the ICJ’s role
in “enforcing limitations to the powers of the Security Council will re-
main limited for some time to come.” The ICJ’s limited role in
reviewing the Council’s discretion is fortunate, as the Security Council
even in the absence of judicial review already finds itself incapable of
effectively addressing many of the difficult challenges it faces (including
nuclear proliferation). If judicial review of Security Council action
becomes established, critical “action may be irreparably delayed while
the target state challenges the lawfulness of that action.”

At present, the most significant external check on the Security
Council’s sanctions authority appears to be the Council’s dependence on
the perception by UN member states that the Council’s dictates are
legitimate. Since the Council is often dependent for the enforcement of
sanctions on the good will of states, including states neighboring the
target that may not be Council members, it is in the Council’s interest to
maximize the perceived legitimacy of its sanctions and other acts.

3. Implementation and Effectiveness of Security Council Sanctions

During the first four years following the end of the Cold War, the
Security Council imposed comprehensive economic sanctions on three
countries: Iraq (1990), the former Yugoslavia (1992), and Haiti (1994).
In the dozen years since 1994, the Council has never again imposed
comprehensive economic sanctions. Comprehensive economic sanctions
were the subject of great controversy during the second half of the
1990s, in considerable part due to the widespread perception that

137. Ratner, supra note 126, at 603.
139. Id. at 372–74.
926, 932 (2005).
141. John Dugard, Judicial Review of Sanctions, in United Nations Sanctions and
International Law, supra note 113, at 83, 90.
142. See Burci, supra note 100. Internal checks include the veto and the conflicting
interests of the five veto-holding members of the Council. For further discussion of legitimacy
issues, see infra note 531.
175, 187 (2005). For an example in the nuclear nonproliferation context, see infra note 531.
sanctions on Iraq were hurting innocent Iraqis while not commensurately advancing the purposes for which sanctions had been imposed.\footnote{144} The debate over the Iraq sanctions experience continues to shape sanctions policy.

Section V.A of this Article addresses the Iraq sanctions case in detail. Drawing on information about the Iraqi weapons programs that came to light following the occupation of Iraq by coalition forces in April 2003, the Article concludes that the Iraq sanctions were very effective in reducing the Iraqi regime's ability to develop weapons of mass destruction. Drawing on post-occupation investigations of the Iraq sanctions, including especially the oil-for-food program, the Article also concludes that the responsibility for the vast majority of the suffering of the Iraqi people during the sanctions period lies with the Saddam Hussein regime and not the Security Council.

Concern during the late 1990s over the impact of comprehensive sanctions on Iraq contributed to the Security Council turning instead towards "targeted sanctions."\footnote{145} Targeted sanctions are "intended to focus coercive pressure on those responsible for wrongdoing, while minimizing unintended negative impacts."\footnote{146} Targeted sanctions explicitly seek to limit the impact of sanctions on the populace at large by focusing sanctions as much as possible on the activities, assets, and tools of particular individuals and institutions that are responsible for the objectionable behavior that prompted the sanctions.\footnote{147} They aim to do so by denying "access to specific products or activities that are necessary to the conduct of an objectionable policy and that are valuable to decisionmaking elites."\footnote{148} The principal types of targeted sanctions the Security Council has deployed thus far include bans on flights into and out of the target country; bans on foreign travel by decision-making elites; freezing over-

\footnote{144}{As a French representative to the Security Council put it, the effects of the Iraq sanctions "should lead the Council to question, in the future, the effectiveness and consequences of broad, indiscriminate sanctions that hurt civilian populations exclusively and whose human cost clearly exceeded the political benefits that the Council could expect." Press Release, Security Council, Security Council Meets to Consider Humanitarian Situation in Iraq; Secretary-General Describes 'Moral Dilemma' for United Nations, U.N. Doc. SC/6833 (Mar. 24, 2000). See also, e.g., Cortright & Lopez, supra note 95, at 1 (noting that "[t]he disastrous impact of the sanctions in Iraq has cast a long shadow. Because of their indiscriminate impact on innocent and vulnerable populations, comprehensive sanctions have become highly unpopular").}

\footnote{145}{See, e.g., Joseph Stephanides, Foreword to Smart Sanctions: Targeting Economic Statecraft, supra note 95, at vii, vii.}

\footnote{146}{Cortright & Lopez, supra note 95, at 2.}

\footnote{147}{Elliott, supra note 97, at 172.}

\footnote{148}{David Cortright & George A. Lopez, Reforming Sanctions, in The UN Security Council: From the Cold War to the 21st Century, supra note 126, at 167, 170.}
seas financial assets connected to the target regime; and embargoes on trade in specific commodities on which the regime is particularly dependent, including arms, fuel, luxury goods, and key export commodities such as diamonds.\(^{149}\) As Part IV will discuss, the nonproliferation sanctions imposed on North Korea and Iran in late 2006 and early 2007 are textbook examples of targeted sanctions.

Advocates of targeted sanctions are motivated by a variety of concerns. These include moral aversion to harming innocents, deference to the humanitarian commitments expressed in the UN Charter, and the belief that targeted sanctions can more effectively maintain or restore international peace and security, including by making it more difficult for target regimes to rally domestic and foreign opposition to sanctions.\(^{150}\)

Targeted sanctions have clearly achieved the goal of avoiding adverse humanitarian impacts. In none of the cases of targeted sanctions during the 1990s did “vulnerable populations experience severe consequences as a result of UN action.”\(^{151}\) However, targeted sanctions are less effective than comprehensive embargoes at achieving the primary purposes for which sanctions are imposed. In their survey of the UN sanctions cases between 1990 and 2001, Cortright and Lopez classified three (Iraq, Yugoslavia, and Angola) out of the four most comprehensive sanctions regimes as being at least partially effective while only two out of the ten targeted sanctions were deemed at least partially effective.\(^{152}\)

Targeted sanctions are less effective for several reasons. To the extent that the pain of sanctions felt by a country’s general population can spur it to rise up and pressure the regime into compliance, targeted sanctions designed to avoid impacting the general populace may be a missed opportunity. In addition, as sanctions become more targeted, monitoring and implementation can become more complex. For example, it may be easier to stop all cargo from entering a target country than to open thousands of cargo containers in search of specific banned items hidden among permitted goods. Also, one major category of targeted sanctions—the freezing of overseas financial assets—tends to be rendered ineffective by slow Security Council action, which often gives potential targets sufficient time to withdraw their overseas assets before the freeze occurs.\(^{153}\)

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149. Id. at 170–72.
151. Cortright & Lopez, supra note 95, at 6.
152. See id. at 8.
153. See Mack & Khan, supra note 150, at 289.
Furthermore, some types of targeted sanctions, even when implemented to maximum effect, may simply not impose sufficient costs to coerce targeted decisionmakers. For example, travel bans may be seen as little more than a nuisance and arms embargoes may not influence governments that possess ample arsenals or arms manufacturing capabilities.\(^{154}\) As Cortright and Lopez conclude, "[c]omprehensive sanctions are more effective than targeted or selective measures. Where economic and social impacts have been greatest, political effects have also been most significant."\(^{155}\)

The targeted sanctions movement has rightly drawn attention to the need to design and implement sanctions that achieve their objectives as quickly as possible at the lowest possible human cost to the populace at large.\(^{156}\) In doing so, however, targeted sanctions supporters have often prioritized minimizing the cost to the populace over achieving the overall objective.\(^{157}\) This may be more or less wise, depending on the cost to the international community of failure to achieve the overridden objective.

The movement to revisit economic sanctions has led to the establishment of two types of institutions, both of which have distilled several important lessons applicable to maximizing the effectiveness of sanctions of any scope. First, “sanctions committees” are now regularly established by Security Council sanctions resolutions. These committees report on how to improve the effectiveness of the sanctions, investigate and report on violations of the sanctions, and regulate and administer humanitarian exceptions.\(^{158}\) Second, a series of sanctions reform research initiatives have been launched by the Swiss, German, and Swedish governments.\(^{159}\)

Implementation has been a significant weakness of most sanctions regimes. While some countries vigorously implement UN-mandated sanctions, others do not.\(^{160}\) In this era of globalization, when the vast majority of products can be purchased from (and sold to) more than one


\(^{155}\) Cortright & Lopez, supra note 95, at 8. See also, e.g., Elliott, supra note 97, at 181.

\(^{156}\) See Elliott, supra note 97, at 181.

\(^{157}\) Cortright & Lopez, supra note 95, at 2.

\(^{158}\) Burci, supra note 100, at 4.

\(^{159}\) Cortright & Lopez, supra note 148, at 173–74.

\(^{160}\) See, e.g., David M. Malone, Conclusion, in The UN Security Council: From the Cold War to the 21st Century, supra note 126, at 617, 634 (“Mostly, states wish to be seen as complying, at least formally .... Nevertheless, widespread sanctions-busting relating to Iraq and a number of other theaters of Council concern ... belie the substance of compliance as opposed to the process of it.”).
country, it is critical that sanctions are not only formally universal but also universally implemented. Globalization, the increasing integration of the international economy, "is a double-edged sword for economic sanctions," because interdependence both increases a target's potential vulnerability to disruption of international trade and capital flows and increases the opportunities for it to evade sanctions.161 As globalization proceeds, sanctions implemented by a small number of states become increasingly ineffective, while universally implemented sanctions become increasingly effective.162 The sanctions committees and reform initiatives have found that while some states fail to fully implement sanctions resolutions out of a lack of political will, others fail due to a lack of capacity. So while one recommendation for reform calls for imposing sanctions against those who are found to be deliberately violating sanctions,163 another recommendation calls for the international community to significantly increase technical assistance and expert advice to states needing implementation help.164

The development of sanctions committees staffed by experts has improved the administration of each discrete set of sanctions. However, the Council's creation of a discrete committee for each target state has resulted in "little accumulation of knowledge" at the institutional level.165 This problem inspired a recommendation that the UN Secretariat develop a specialized unit in charge of pre-assessment and monitoring of sanctions regimes.166 Unfortunately, the Security Council has declined to adopt these and many other expert recommendations, "sometimes for political reasons" and "sometimes because their implementation would have required resources that member states were unwilling to mobilize."167

IV. THE RELUCTANCE TO IMPOSE SANCTIONS IN RESPONSE TO NUCLEAR PROLIFERATION

Oliver Wendell Holmes, Jr. wrote that, "[i]f you want to know the law . . . you must look at it as a bad man, who cares only for the material

162. Id.
163. Cortright & Lopez, supra note 148, at 177.
164. Id.
165. See Chesterman & Pouligny, supra note 106, at 514.
166. Id.
167. See Brzoska, supra note 154, at 524.
consequences which such knowledge enables him to predict, not as a
good one, who finds his reasons for conduct, whether inside the law or
outside it, in the vaguer sanctions of conscience. Holmes’ “bad man,”
in trying to predict the material consequences of proliferation, or of non-
compliance with the NPT, would consider both the probability of getting
caught and the sanctions likely to be imposed if caught. As discussed in
Part II, it is exceptionally difficult under the basic safeguards agreement
to detect an NPT violation. Part III delineated the Security Council’s
legal authority to sanction any proliferant activity, regardless of whether
or not that activity violates the NPT or any other legal instrument. This
Part reviews several key examples of the international community’s re-
luctance to impose sanctions for proliferant activity, including even
clear-cut violations of nuclear nonproliferation law.

A. Safeguards Agreements

In the classic article Broken Windows, James Wilson and George
Kelling describe how unaddressed legal violations can foster additional
and more serious legal violations by contributing to a sense of lawless-
ness. The international community’s failure to sanction minor NPT
violations by a large number of countries thus raises significant ques-
tions and is worth noting before turning to the failure to address major
nonproliferation violations.

NPT Article III requires that state parties “shall conclude” safe-
guards agreements with the IAEA. Thirty NPT state parties have yet to
conclude such safeguards agreements. In the absence of such agree-
ments, the IAEA has no authority to carry out inspections in these
countries. Yet the failure of these countries to comply with this basic
procedural obligation of NPT membership has drawn no response from

168. Oliver Wendell Holmes, Jr., The Path of the Law, 10 HARV. L. REV. 457, 459
(1897).
169. James Q. Wilson & George L. Kelling, Broken Windows, ATLANTIC MONTHLY,
www.iaea.org/Publications/Factsheets/English/nptstatusoverview.html (updated Mar. 22,
2007).
171. But see Richard L. Williamson, Jr., Hard Law, Soft Law, and Non-Law in Multilat-
states have failed their duty under the NPT to enter into a safeguards agreement with the
IAEA. However, this has not been a matter of major international significance, as virtually all
those noncomplying states have no nuclear materials or equipment that would trigger the ac-
tual application of safeguards.”). Although many of the countries without safeguards seem
unlikely to develop nuclear weapons programs in the foreseeable future, one country on the
list—Saudi Arabia—is considered a strong candidate for acquiring nuclear weapons should
Iran do so.
Averting Catastrophe
other NPT states.\textsuperscript{172} It is not hard to imagine that the fact that these thirty countries are in violation of their own basic NPT obligations may make them less likely to hold proliferants to their obligations. Another flouted obligation, procedural in nature, is the failure by the IAEA Board of Governors for over two years to abide by its own governing statute and promptly report Iranian noncompliance to the U.S. Security Council.\textsuperscript{173}

The following two Sections analyze how and why the international community, faced with a series of substantive NPT violations by North Korea and Iran, failed for years to impose sanctions and then, in 2006 and early 2007, imposed sanctions that were too weak to effectively coerce, contain, or deter violations. The final Section analyzes how and why the international community also failed to effectively sanction the nuclear tests by India and Pakistan, which gravely damaged the broader nuclear nonproliferation regime.

B. North Korea

North Korea became a party to the NPT in 1985 and concluded a safeguards agreement in 1992.\textsuperscript{174} Inconsistencies soon emerged between North Korea's initial May 1992 report to the IAEA under its safeguards agreement and the agency's findings.\textsuperscript{175} The IAEA requested—and North Korea refused to provide—additional information and access to two North Korean sites.\textsuperscript{176} In March 1993, North Korea gave three months' notice of its intention to withdraw from the NPT. In April 1993, the IAEA Board of Governors formally declared North Korea in noncompliance with its safeguards agreement and, pursuant to Article XII(c) of the IAEA Statute, referred the issue to the Security Council.\textsuperscript{177}

In May 1993, the Security Council, in Resolution 825, called upon North Korea to comply with its safeguards agreement and "reconsider" its threat to withdraw from the NPT.\textsuperscript{178} The United States proposed that the Council sanction North Korea, but China made clear it would veto such a measure.\textsuperscript{179} Three U.S. officials who played key roles in the crisis

\begin{itemize}
\item \textsuperscript{172} See Asculai, supra note 74, at 9 ("[N]o action other than mention of the fact was taken.").
\item \textsuperscript{173} See infra Section IV.C.
\item \textsuperscript{174} IAEA, Fact Sheet on DPRK Nuclear Safeguards, http://www.iaea.org/NewsCenter/Focus/iaeaDprk/fact_sheet_may2003.shtml [hereinafter IAEA DPRK Fact Sheet].
\item \textsuperscript{175} Id.
\item \textsuperscript{176} Id.
\item \textsuperscript{177} Id.
\item \textsuperscript{179} See Douglas Jehl, North Korea Says It Won't Pull Out of Arms Pact Now, N.Y. TIMES, June 12, 1993, at A1. But see Witt, PONEMAN & GALLUCCI, supra note 44, at 198–200
\end{itemize}
assert that, while China opposed North Korea's nuclear program, it also "feared that economic sanctions might trigger the collapse of the North Korean regime, causing a flood of refugees into its northeastern provinces." 

The Security Council's failure to impose sanctions in response to North Korea's noncompliance left the United States and its allies to fashion their own ad hoc response. The United States and North Korea subsequently concluded the Agreed Framework, under which the United States and several partners agreed to compensate North Korea for taking certain nonproliferation steps, including some that went beyond North Korea's NPT obligations, and for committing to other nonproliferation steps. As part of the deal, North Korea agreed to remain a party to the NPT. North Korea did not agree to come into immediate compliance with all of its NPT obligations, but it did agree to comply once the United States and its partners delivered specified incentives.

North Korea, however, never did comply with its NPT obligations, and in 2002 it was caught violating the Agreed Framework. In January 2003, North Korea once again announced its withdrawal from the NPT, this time with immediate effect. Shortly thereafter, North Korea announced that it possessed nuclear weapons.

A strong response by the international community during this period might well have stopped North Korea from proceeding further with its nuclear weapons program. The North Korean regime appears extremely vulnerable to strong sanctions, so long as they include Chinese and South Korean participation. China supplies between seventy and ninety...
percent of North Korea’s oil needs, \(^{190}\) and China’s brief closure in 2003 of its oil pipeline to North Korea for “maintenance” prompted a quick and conciliatory North Korean response. \(^{191}\) The North Korean regime is also highly dependent on South Korea, which has, since the mid-1990s, helped sustain it with more than six billion dollars in humanitarian aid, investment, and other economic assistance. \(^{192}\)

China, however, remained concerned that significant pressure on North Korea might cause the North Korean regime to collapse, thereby flooding China with refugees. \(^{193}\) Accordingly, China took the lead in preventing the Security Council from responding to North Korea’s noncompliance with its NPT and Agreed Framework obligations, withdrawal from the NPT, and announcement of a nuclear arsenal.

For example, China in spring 2003 blocked a Security Council statement criticizing North Korea for its noncompliance and withdrawal, declaring that such a statement would “complicate” diplomacy with North Korea. \(^{194}\) Russia backed the Chinese position, with Russia’s UN ambassador urging “dialogue” and stating, “I think it is a bad idea to condemn.” \(^{195}\) Two weeks later, North Korea responded to this forbearance by declaring that it “possesses a nuclear arsenal and might sell some of it to the highest bidder.” \(^{196}\) Again, the Security Council took no action.

Indeed, for eleven years between 1995 and 2006—a period in which North Korea continually failed to comply with its NPT safeguard obligations, cheated on the Agreed Framework, withdrew from the NPT, suspects. To be effective, China and South Korea have to join.”); Peter Ford, Nuclear Test Hangs Over North Korea Talks, CHRISTIAN SCI. MONITOR, Dec. 18, 2006, at 7 (quoting a “senior US diplomat” as saying “the Chinese have by far the greatest leverage” and “if the Chinese decided to . . . stop the oil, that would make a difference”).


192. Id. (also noting that South Korea is “coming to a bitter realization that its eight years of providing aid and engagement have only been rewarded with a nuclear test”).

193. See, e.g., Kessler & Pomfret, supra note 36.


195. Lynch & Struck, supra note 194.

and announced it had manufactured nuclear weapons—in the Security Council issued no resolutions referring to any of these North Korean actions. Not until North Korea launched ballistic missiles on July 4, 2006, did the Security Council act. Resolution 1695 imposed missile-related sanctions and finally condemned North Korea’s "announcement of withdrawal" from the NPT and "stated pursuit of nuclear weapons." The resolution also urged North Korea "to return at an early date" to the NPT, a statement rendered somewhat ironic by the Security Council’s three-and-a-half years of tardiness in issuing such a call.

Finally, undeterred by the international community’s previous weak responses, North Korea on October 9, 2006, took another step towards a nuclear arsenal by testing a nuclear weapon. Less than two days later, North Korean leaders inaugurated a potentially dangerous new era of nuclear blackmail, announcing: "We hope the situation will be resolved before an unfortunate incident of us firing a nuclear missile comes. That depends on how the U.S. will act."

On October 14, 2006, the Security Council responded to North Korea’s nuclear test by passing what President Bush hailed as a “tough” resolution. Resolution 1718 determined that North Korea’s nuclear test posed a “clear threat to international peace and security” and set forth several decisions as to what measures North Korea must take to maintain international peace and security. In doing so, the resolution very significantly broadened both the range of nuclear activities prohibited to North

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197. Id.
198. As Dr. Pierre Goldschmidt, who served as Deputy Director General of the IAEA from 1999 to 2005, put it in May 2006:

Since 1993 North Korea has been declared every year by the IAEA to be in non-compliance with its safeguard agreements and reported to the United Nations Security Council (UNSC), without the latter deciding to take any action. In 2003, North Korea notified that it was withdrawing from the NPT (the first time this has happened in the history of the Treaty) and in 2004 declared possessing nuclear weapons, without any move from the UNSC . . . .

Goldschmidt, supra note 77, at 4.
200. Id. ¶¶ 3–4.
201. Id. at pmbl.
202. Id. ¶ 6.
203. See Ramstad, Solomon & Fairclough, supra note 25.
206. See S.C. Res. 1718, supra note 12, at pmbl.
Korea under international law and the IAEA's authority to detect such activities. For example, in ordering that North Korea "act strictly in accordance with the obligations applicable to parties" under the NPT, the resolution essentially reimposed the NPT treaty obligations on North Korea. By mandating that North Korea "abandon all . . . existing nuclear programmes," the resolution exceeded the NPT requirements, which do not categorically prohibit nuclear programs. The resolution also required North Korea to provide the IAEA with "such access . . . as may be required and deemed necessary by the IAEA," thereby giving the IAEA more authority to detect nuclear activities in North Korea than it possessed under either the NPT or North Korea's IAEA safeguards agreement. Thus, Resolution 1718 did not merely require North Korea to bring itself into compliance with any preexisting legal obligations relating to nuclear nonproliferation; it imposed new, more expansive legal obligations.

The resolution also set forth the measures the Council would employ to give effect to its decisions. It banned the export to North Korea of items that could contribute to North Korea's nuclear, biological, and chemical weapons or ballistic missiles programs; heavy military equipment such as battle tanks and warships; and luxury goods. The resolution also banned international travel by, and froze the overseas assets of, individuals associated with North Korea's WMD programs. In addition, the resolution authorized all countries to inspect cargo going in and out of North Korea to detect illicit weapons.

In the leadup to the resolution, Japan had urged the adoption of "comprehensive sanctions." Russia and China, however, refused to let

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207. Id. ¶ 6.
208. Id.
209. See supra Part I.
211. While North Korea had clearly violated the safeguards obligations of an NPT party, it is unclear both whether any of those obligations would survive a legally effective withdrawal from the NPT and whether or not North Korea's 2003 announcement of withdrawal from the NPT was legally effective. For an argument that the IAEA retains a continuing right to inspections even against a state which has exercised its right to withdraw from the NPT, see Antonio F. Perez, Survival of Rights Under the Nuclear Non-Proliferation Treaty: Withdrawal and the Continuing Right of International Atomic Energy Agency Safeguards, 34 VA. J. INT'L L. 749 (1994). For an analysis of four different possible interpretations of the North Korean status under the NPT following its withdrawal in January 2003, see Masahiko Asada, Arms Control Law in Crisis? A Study of the North Korean Nuclear Issue, 9 J. CONFLICT & SECURITY L. 331 (2004).
212. S.C. Res. 1718, supra note 12, ¶ 8.
213. Id.
214. Id.
215. Fifield, supra note 189.
the resolution go forward until it was heavily watered down. As a result, the resolution is likely too weak to accomplish any of the substantive sanctions goals: coercion, containment, deterrence, paving the way politically for future stronger sanctions, creating a legal foundation upon which some senders will immediately build additional stronger sanctions, or retribution.

The sanctions are likely too weak to convince the North Korean regime that its nuclear weapons program comes at too high a price and must be relinquished. Having spent vast sums to develop a nuclear arsenal, North Korea could hardly be expected to surrender it in exchange for items that could contribute to building a WMD program that has already achieved its major goal, heavy military equipment that is far less necessary for North Korea's defense now that it has nuclear weapons, international travel for an insular country known as "the Hermit Kingdom," and luxury goods. This is especially true for a leadership that apparently feels that absent its nuclear arsenal, the United States and its allies might seek a regime change. Nor did Resolution 1718 significantly further a populist or other uprising by North Koreans, who have already suffered far worse under the Kim regime.  

Resolution 1718 also did not significantly reduce or contain North Korea's ability to implement its objectionable WMD policies. While North Korea may need additional foreign technology to achieve the manufacture of uranium-based nuclear weapons, it has already achieved the manufacture of plutonium-based nuclear weapons. Nor were the sanctions on North Korea sufficiently strong to change the cost-benefit calculations of, and thus deter, other countries contemplating nuclear proliferation. Soon after the North Korean sanctions were imposed, Iranian President Mahmoud Ahmadinejad declared that Iran would not be deterred by them. Shortly thereafter, Iran announced that it was accelerating its own nuclear program. In fact, the Iranians reportedly were

218. See Ford, supra note 189.
219. See supra note 32.
220. See, e.g., Paul Kerr, New Details Emerge on NK Nuclear Program, ARMS CONTROL TODAY, Dec. 2006, at 37.
encouraged in their defiance by the weakness of the North Korean sanctions.\footnote{See id. ("A senior Western diplomat in Tehran said Iran went ahead after seeing the limited sanctions imposed on North Korea after its nuclear test this month. 'They were reasonably reassured that if North Korea can live with the sanctions, they can do better,' said the diplomat.")} There was no indication that any of North Korea's principal trading partners would use the Resolution 1718 sanctions as legal authority to impose stronger sanctions than those set forth in the resolution itself.\footnote{See, e.g., Joseph Kahn, China May Press North Koreans, N.Y. TIMES, Oct. 20, 2006, at A1 (quoting the Chinese Foreign Ministry spokesman as saying that "[a]ll sides need to consider how to implement Resolution 1718 in a balanced way and not devise ways to willfully expand the sanctions").}

Rather, there was considerable concern that North Korea's two largest trading partners, China and South Korea, might not fully implement the Resolution 1718 sanctions.\footnote{See Jim Yardley, Sanctions Don't Dent North Korea-China Trade, N.Y. TIMES, Oct. 27, 2006, at A1; Norimitsu Onishi, Questions Grow Over U.N. Curbs on North Korea, N.Y. TIMES, Oct. 16, 2006, at A1.}

Resolution 1718 also seems unlikely to have achieved any meaningful retributive punishment of the North Korean leadership. Depriving the regime of foreign travel and luxuries seems likely to cause more annoyance than suffering, and surely is not proportional to the grave harm done by the North Korean test to the nuclear nonproliferation regime. The freezing of foreign assets was likely rendered ineffective by the fact that the Security Council's deliberative process inevitably provided the targets with sufficient advance warning that they could withdraw their overseas assets before the freeze was imposed. On the other hand, given that North Korea's nuclear test may not have violated international law, retributive punishment may have been an inappropriate purpose for the sanctions.

In the end, the sanctions imposed on North Korea by Resolution 1718 were weaker than those the Security Council had previously imposed in response to many lesser threats to international peace and security. For example, the North Korean sanctions are weaker than those imposed on South Africa in response to apartheid\footnote{See, e.g., S.C. Res. 418, supra note 112, ¶ 2 (prohibiting "any provision to South Africa of arms and related matériel of all types").} and on Liberia\footnote{See, e.g., S.C. Res. 1521, ¶¶ 2, 6, 10, U.N. Doc. S/RES/1521 (Dec. 22, 2003) (prohibiting provision to Liberia of "arms and related matériel of all types," barring "direct or indirect import of all rough diamonds from Liberia," and banning import of all "timber products originating in Liberia").} and Cote D'Ivoire during their civil wars,\footnote{See, e.g., S.C. Res. 1572, ¶¶ 7, 9, 11, U.N. Doc. S/RES/1572 (Nov. 15, 2004) (prohibiting export to Cote d'Ivoire of "arms or any related matériel" for thirteen months,} and far weaker than those
imposed on Libya in response to its downing of Pan Am flight 103,229
Sierra Leone in response to its May 1997 military coup,230 the Federal
Republic of Yugoslavia during the Bosnian crisis,231 and Haiti in response
to its 1991 military coup.232 Rather than reaffirming the nuclear nonpro-
liferation regime, the post-test sanctions on North Korea are in fact a
manifestation of its decline.

In February 2007, North Korea entered into an agreement with the
United States, China, Japan, Russia, and South Korea under which North
Korea committed to shutting down its Yongbyon nuclear facility in ex-
change for incentives, including 50,000 tons of heavy fuel oil.233 This
agreement appears to be a small step forward, in that it may help cap the
size of North Korea's nuclear arsenal. But the agreement is nonbinding
(indeed, it was not even signed but simply issued as a joint statement),
freezes only North Korea's plutonium facilities (which were anyway at the
end of their useful lives)234 but not its uranium program, provides little-to-
no assurance that North Korea will agree to effective verification of its
imposing a travel ban of persons to be designated by the Committee as a threat to national
peace and reconciliation, and imposing a foreign asset freeze on various leaders).

229. See S.C. Res. 748, ¶ 5 (Mar. 31, 1992) (prohibiting all aircraft travel to or from
Libya and barring the export to Libya of “arms and related materiel of all types”); S.C. Res.
foreign assets of the Libyan government and any Libyan undertaking; prohibiting provision to
Libya of items pertaining to pumping, transporting or refining oil).

travel by members of the Sierra Leone military junta, and prohibiting “the sale or supply to
Sierra Leone ... of petroleum and petroleum products and arms and related materiel of all
types”).

231. See, e.g., S.C. Res. 713, ¶ 6 (Sept. 25, 1991) (imposing a “general and complete
embargo on all deliveries of weapons and military equipment to Yugoslavia”); S.C. Res. 757,
¶¶ 4, 5, 7(a), 50 (May 30, 1992) (prohibiting all imports from the Federal Republic of Yugo-
slavia (FRY) and all exports, except medicine and certain foodstuffs, to the FRY; barring
provision of funds to government, commercial undertakings, and persons of and within the
FRY; prohibiting all aircraft travel to and from the FRY; suspending scientific, technical, cul-
tural, and sports exchanges with the FRY); S.C. Res. 820, ¶¶ 12, 21, U.N. Doc. S/RES/820
(Apr. 17, 1993) (prohibiting provision in relation to the FRY of all except certain services and
freezing foreign assets of government and commercial undertakings of the FRY).

the sale or supply to Haiti of “petroleum or petroleum products or arms and related materiel of
all types”; freezing foreign assets of Haiti’s government); S.C. Res. 917, ¶¶ 3, 6(a), 7(a), 8,
U.N. Doc. S/RES/917 (May 6, 1994) (banning travel by Haitian coup participants, military,
police, and their immediate families; prohibiting all imports from Haiti; prohibiting all exports
to Haiti except medicines, food, and informational materials).

233. Press Release, Office of the Spokesman, U.S. Dep’t of State, North Korea-
Agreement].

234. Bennett Ramberg, How to Live with a Nuclear North Korea, INT’L HERALD TRIB.,
compliance with the agreed freeze, does not include a North Korean commitment not to detonate or sell nuclear weapons, risks being seen by other potential proliferators as rewarding proliferation, and leaves to subsequent negotiations in the indefinite future any North Korean relinquishment of the nuclear weapons and weapons-grade fissile material it already possesses.\textsuperscript{235} The February 2007 agreement thus leaves nuclear nonproliferation in a far worse state than if the Security Council had, before North Korea built its nuclear arsenal, used comprehensive economic sanctions to make it clear to North Korea that its nuclear weapons program was coming at too high a price and had to be relinquished.

C. Iran

1. Delayed Response

The international community has responded to two decades of Iranian noncompliance as weakly as it responded to North Korea’s nuclear weapons program. In 2002, the IAEA “discovered an 18-year pattern of noncompliance by Iran with its obligations to report all its nuclear activities.”\textsuperscript{236} Over those eighteen years, Iran built major nuclear facilities without telling the IAEA and without IAEA detection.\textsuperscript{237}

The first written report in which the IAEA Director General declared Iran’s noncompliance to the IAEA Board of Governors came almost a year later, on June 6, 2003.\textsuperscript{238} A subsequent report by the Director General in November 2003 provided more detail on Iran’s breach of its NPT safeguards obligations.\textsuperscript{239} Pierre Goldschmidt, IAEA Deputy Director General from 1999 to July 2005, has stated that the Iranian noncompliance detailed in the IAEA’s “damning report to its Board of Governors” in November 2003 “should have been reported to the UNSC [UN Security Council] as foreseen in the Agency’s statute.”\textsuperscript{240} Yet the IAEA Board of


\textsuperscript{237.} See Nazila Fathi, \textit{Iran: Minister Says “Nuclear Spies” Worked for U.S. and Israel}, \textit{N.Y. TIMES}, Dec. 23, 2004, at A11 (noting that in 2002, an Iranian dissident group “revealed the existence of a secret nuclear facility in Natanz and a heavy-water complex near Arak. At the time, the United Nations nuclear monitoring agency was unaware of them.”).


\textsuperscript{239.} See IAEA, Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran, Report by the Director General, IAEA Doc. GOV/2003/75 (Nov. 10, 2003).

\textsuperscript{240.} Goldschmidt, supra note 77, at 5.
Governors failed to report Iran's noncompliance to the Security Council until February 2006, over two years later. This reporting delay clearly violated the IAEA's governing statute, which gives the IAEA Board no choice but to promptly report noncompliance to both the Security Council and the General Assembly.

Goldschmidt suggests three main reasons for the lack of support on the IAEA Board for prompt reporting of Iranian noncompliance. First, many states insisted there was "no evidence" that the undeclared material and activities were related to a nuclear weapons program, even though "they were all well aware that the Agency had neither the authority nor the means required to prove that this could be the case before it is too late." Second, some states feared that moving the Iran noncompliance issue "out of the IAEA's hands" could facilitate the United States taking military action against Iran as it had against Iraq. Third, some states "fear[ed] that if Iran was referred to the Security Council, Russia and China would use their veto right to block any resolution adverse to the Islamic Republic, as was the case for North Korea, with no concrete outcome whatsoever." Thus, the IAEA failed to abide by its own noncompliance reporting requirements in part out of fear that Security Council inaction would expose the nuclear nonproliferation regime as toothless.

By the time the IAEA reported Iranian noncompliance to the Security Council in February 2006, Iran had been found to be in possession of documents relating to "the fabrication of nuclear weapons components," and the Agency had information regarding Iranian tests "which could have a military nuclear dimension." While the United Kingdom, France, and Germany ("the EU-3") and the IAEA fruitlessly negotiated with Iran during the years between the IAEA's first finding of Iranian noncompliance and the IAEA's report to the Security Council, Iran "made stunning advances in mastering all technological aspects of uranium conversion and enrichment without incurring any negative..."
repercussion. In fact, Iranian officials have crowed about how the negotiations between it and the West have bought Iran time to move forward with its nuclear program. They insist that this progress has created "facts on the ground" which are "irreversible."

The Security Council finally issued its first resolution with respect to Iran's nuclear program on July 31, 2006. Resolution 1696 called upon Iran to take several steps, including suspending enrichment-related and reprocessing activities, that Iran had already been called upon to undertake by the IAEA in its Board of Governors Resolution of February 2006. Resolution 1696 also expressed the Security Council's "intention," in the event Iran had not taken such actions by August 31, 2006, to "adopt appropriate measures" under Article 41 of the UN Charter "to persuade Iran to comply." Article 41 authorizes the Security Council to impose sanctions that do not involve "the use of armed force." The IAEA Director General, in reports to the IAEA on August 31, 2006, and November 14, 2006, made clear that Iran had failed to take the steps that Resolution 1696 required it to perform by August 31.

On December 23, 2006, in Resolution 1737, the Security Council finally imposed sanctions on Iran for its nuclear nonproliferation violations. Three months later, in Resolution 1747 of March 24, 2007, the Security Council responded to Iran's failure to comply with the requirements of Resolution 1737 by slightly augmenting its sanctions on Iran. Prior to assessing the sanctions imposed by Resolutions 1737 and 1747, it is important to consider Iran's economic situation and vulnerabilities.

247. Goldschmidt, supra note 77, at 8.
251. IAEA BOG Iran Resolution of Feb. 4, 2006, supra note 246.
253. U.N. Charter art. 41. Article 42, which contains the Security Council's authority to approve military action "as may be necessary to maintain or restore international peace and security," was not mentioned in Resolution 1696. Id. art. 42.
Iran’s economy has been boosted, and its negotiating leverage enhanced, by the relatively high price of oil. Iran has the second-largest oil reserves of any country in the world and is located in the heart of the Persian Gulf region, where its military is within striking distance of approximately two-thirds of the world’s total oil reserves. Oil prices would likely skyrocket if Iranian supplies were cut off or Iran moved to cut off supplies from the Persian Gulf to the rest of the world. Iran’s oil wealth also makes it an increasingly lucrative export market, with total exports to Iran from Russia, China, France, and the United Kingdom expected to top twenty-two billion dollars in 2006, up from eighteen billion dollars in 2005.

However, Iran’s heavy dependence on oil export revenues and other foreign trade leaves it highly vulnerable to economic sanctions. The Iranian government draws between forty and fifty percent of its budget from oil export revenues, and some ninety percent of Iran’s population receives its income from the state. Remarkably for a country that is investing so much in nuclear programs, Iran has never developed sufficient capacity to refine the petroleum it pumps out of its own soil, and therefore depends on other countries to refine forty percent of the gasoline it needs for internal consumption. Notwithstanding its oil wealth, Iran’s economy has been so mismanaged that the living standard of the average Iranian today is lower than it was at the time of the Islamic revolution in 1979. According to official reports, which may be understated, unemployment among Iranian young people is at thirty-four

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259. King & Champion, supra note 257.
260. See, e.g., Thomas L. Friedman, The Bus is Waiting, N.Y. TIMES, Oct. 11, 2006, at A27 (“[I]f China and Russia told Iran that they would join in the toughest possible U.N. economic sanctions on Tehran if it persisted in its nuclear program, the ayatollahs would . . . back down.”).
percent and rising.\textsuperscript{265} Wealthy Iranians have already moved over $200 billion out of Iran since President Ahmadinejad took office in 2005.\textsuperscript{266} Many Iranians, including student groups, have strongly criticized the Iranian government for endangering the economy and international relationships over the nuclear issue; sanctions could strengthen the hand of these opposition figures.\textsuperscript{267}

Russia has blocked Security Council imposition of strong sanctions on Iran,\textsuperscript{268} even though Russia says it opposes Iran developing nuclear weapons.\textsuperscript{269} Russia’s opposition to strong sanctions is apparently driven by its desire to continue lucrative deals to sell Iran weapons,\textsuperscript{270} nuclear reactors, and other high-tech machinery.\textsuperscript{271} Russia may also view Iran as a useful geopolitical counterbalance to the United States.\textsuperscript{272} According to Dimitri Simes, a Russia expert who is president of the Nixon Center think tank in Washington, D.C., “[i]t is clear that Moscow will not support any meaningful resolution that would interfere with Russia’s trade with Iran.”\textsuperscript{273} Alexei Arbatov, the Director of the Center for International Security at the Russian Academy of Sciences and former deputy chair of the Russian parliament’s defense committee, says that “[t]here is no doubt that Russia does not want Iran to have nuclear weapons,”\textsuperscript{274} but “Russia has huge political and economic interests with Iran.”\textsuperscript{275} Arbatov


\textsuperscript{266} Stephens, supra note 263.


\textsuperscript{269} See, e.g., Mikhail Kamynin, Spokesman, Ministry of Foreign Affairs of Russ. Press Conference (June 10, 2006) (“Russia is actively involved in international efforts to unblock the problem by diplomatic methods on the basis of a common position on the inadmissibility of nuclear weapons in Iranian possession.”).

\textsuperscript{270} See Morley, supra note 258; see also King & Champion, supra note 257 (noting that, in December 2005, Russia agreed to sell Iran a $700 million air defense missile system).


\textsuperscript{273} King & Champion, supra note 257.

\textsuperscript{274} Arbatov, supra note 272.

\textsuperscript{275} Id.
criticized the Russian position as “self-defeating” because the Russian position demands that “Iran give away something very dear to it, while simultaneously removing all tough levers to enforce such a concession.”

China has joined Russia in opposing strong sanctions on Iran. China’s stance stems in considerable part from its dependence on Iranian fuel, as it currently buys eighteen percent of its crude oil imports from Iran. In December 2006, amidst the negotiations over Resolution 1737, China signed a sixteen billion dollar deal to develop Iran’s North Pars gas field and was negotiating a deal to develop Iran’s Yadavaran oil field.

2. Resolutions 1737 and 1747

Before Russia and China finally agreed to the sanctions imposed on Iran by Resolution 1737, they managed to both delay the sanctions and water them down. Resolution 1737’s tepidness is apparent even in its handling of the threshold “threat to the peace” determination, which is nowhere specified but merely implicit in the resolution’s affirmation that the Council is “[a]cting under Article 41 of Chapter VII” and “mindful of its primary responsibility under the Charter of the United Nations for the maintenance of international peace and security.”

Resolution 1737 includes several decisions as to the measures that Iran must take to maintain international peace and security. Principally, Iran must:

- Suspend all enrichment-related and reprocessing activities.
   The resolution makes clear that the full force of the Council’s authority stands behind the enrichment-related and reprocessing suspension previously “deem[ed] necessary” by the IAEA and “demand[ed]” by the Security Council. Iran previously insisted it had an “inalienable right” under NPT Article IV to “develop research, production and use of nuclear

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276. Id.
277. See Farley, supra note 268; Lynch, supra note 268; Kerr, supra note 268.
278. See William Mellor & Le-Min Lim, To Slake its Thirst for Oil, China Scours Backwaters of the World, INT’L HERALD TRIB., Sept. 27, 2006, at 25; King & Champion, supra note 257.
279. Ruba Husari, Iran, China Sign $16 Billion Deal for North Pars Gas Field, OIL DAILY, Dec. 21, 2006 at 5.
280. See Farley, supra note 268; Lynch, supra note 268.
282. Id. ¶ 2(a).
283. IAEA BOG Iran Resolution of Feb. 4, 2006, supra note 246, ¶ 1.
energy for peaceful purposes" and that neither the NPT nor the IAEA Statute provided a legal basis for requiring Iran to suspend these activities. Resolution 1737’s binding suspension conclusively undermines that argument because, as UN Charter Articles 25 and 103 specify, the obligation to comply with Security Council decisions prevails in case of conflict with rights under the NPT or any other treaty.

- Suspend work on all heavy water-related projects. Resolution 1737’s order to Iran to suspend this work contrasts with the IAEA’s February 2006 resolution, which only “deem[ed] it necessary” for Iran to “reconsider” its construction of a research reactor moderated by heavy water.

- Refrain from exporting certain specified nuclear and ballistic missile equipment and technology. This provision has no counterpart in either the IAEA’s February 2006 resolution or Resolution 1696.

- Provide “such access and cooperation as the IAEA requests to be able to verify” the suspensions and “resolve all outstanding issues, as identified in IAEA reports.” This provision makes clear that the full force of the Council’s authority stands behind the IAEA’s requests for access and cooperation, and gives the IAEA more access authority (as much additional authority as it “requests”) to resolve Iranian nuclear issues than it had under the NPT and Iran’s IAEA safeguards agreement.

Resolution 1737 also sets forth the Council’s decisions on several sanctions measures to be employed to give effect to its mandates. These measures principally include: 1) restrictions on the export to Iran of certain specified nuclear and ballistic missile items, materials, equipment,
and technology; \textsuperscript{290} and 2) a freeze of overseas assets of twelve named officials and ten institutions associated with Iran’s proliferation-sensitive nuclear activities or the development of nuclear weapon delivery systems. \textsuperscript{291} In addition, Resolution 1737 requested that the IAEA Director General provide a report within sixty days on Iranian compliance with the resolution \textsuperscript{292} and committed the Council, in the event that the report found Iranian noncompliance, to adopting “further appropriate measures under Article 41” of the UN Charter “to persuade Iran to comply with this resolution and the requirements of the IAEA.” \textsuperscript{293}

On February 22, 2007, the IAEA Director General reported that Iran had not complied with the requirements of Resolution 1737. \textsuperscript{294} In response to Iran’s continuing noncompliance, the Council, in Resolution 1747 of March 24, 2007, slightly augmented the Resolution 1737 sanctions by imposing a ban on the export of arms by Iran \textsuperscript{295} and extending the foreign asset freeze imposed by Resolution 1737 to fifteen additional named Iranian officials and thirteen additional Iranian entities. \textsuperscript{296} In addition to these two principal legally-binding measures, the resolution included several nonbinding requests to member states. Resolution 1747 also requested that the IAEA Director General provide, within sixty days, a report on Iranian compliance with Resolutions 1737 and 1747. \textsuperscript{297} Finally, Resolution 1747 committed the Council, in the event that the report found Iranian noncompliance, to adopting “further appropriate measures under Article 41” of the UN Charter to “persuade Iran to comply.” \textsuperscript{298} The original draft of Resolution 1747 by France, Germany, and the United Kingdom had included bans on the travel of relevant Iranian officials and on arms exports to Iran, but these were removed at the behest of Russia and China. \textsuperscript{299}

Standing on their own, Resolutions 1737 and 1747 are too weak to coerce Iran into compliance, contain Iran’s ability to advance its nuclear weapons program, deter other states from following Iran’s lead and developing their own nuclear weapons program, or retributively punish

\textsuperscript{290} Id. ¶¶ 3–6.
\textsuperscript{291} Id. ¶¶ 12–15, annex.
\textsuperscript{292} Id. ¶ 23.
\textsuperscript{293} Id. ¶ 24(c).
\textsuperscript{295} S.C. Res. 1747, supra note 256, ¶ 5.
\textsuperscript{296} Id. ¶ 4, annex I.
\textsuperscript{297} Id. ¶ 12.
\textsuperscript{298} Id. ¶ 13(c).
\textsuperscript{299} See Kerr, supra note 268.
Iran. The two resolutions may, however, prove more effective in paving the way, both politically and legally, for additional, stronger sanctions. The primary purpose of the sanctions was coercive. But as of mid-April 2007, Resolutions 1737 and 1747 clearly had not succeeded in coercing Iran into compliance. The Iranian Foreign Ministry derided Resolution 1737 as "weak" and Ali Larijani, Iran's chief nuclear negotiator, stated that Iran's response to Resolution 1737 was to accelerate its nuclear program by speeding up installation of 3,000 centrifuges at its Natanz enrichment plant. The day after the Council passed Resolution 1747, Iran announced that it would reduce rather than increase its cooperation with the IAEA, the Iranian foreign minister denounced the sanctions as "illegal," and President Ahmadinejad said the sanctions would not halt Iran's uranium enrichment "even for a second." Two weeks after Resolution 1747 passed, Ahmadinejad announced in a

300. See Helene Cooper & Steven R. Weisman, West Tries a New Tack to Block Iran's Nuclear Agenda, N.Y. TIMES, Jan. 2, 2007, at A3 (“[F]ew believe that the sanctions resolution that passed Dec. 23 has the muscle to sway Iran to abandon its nuclear ambitions.”); Comment, Bomb and Bombast, TIMES (London), Dec. 28, 2006, at A14 (“[N]o one is so naïve as to expect that the regime's ambitions will be thwarted by freezing the assets of a handful of Iranian companies and officials.”); Farley, supra note 268 “Security Council diplomats ... privately conceded that they did not expect the bans to have a significant effect.”; R. Nicholas Burns, Under Sec'y for Political Affairs, U.S. Dep't of State, Conference Call on UN Sanc-
tions Resolution 1737 (Dec. 23, 2006), available at http://www.state.gov/p/us/rm/2006/78246.htm [hereinafter Burns, Conference Call] (stating: “We don’t think this resolution is enough in itself. We want the international community to take further action.”).

301. See Burns, Conference Call, supra note 300 (“The aim of sanctions is . . . to drive up the cost to the Iranians of . . . thumping their nose at the international community by proceeding with these nuclear technological programs. [W]e want to let the Iranians know that there is a big cost to them, and we hope that those Iranians who wish to . . . negotiate . . . will then be in a stronger position to argue that’s the best case for Iran.”); In Quotes: Reaction to UN Sanctions, BBC NEWS, Dec. 24, 2006, http://news.bbc.co.uk/2/hi/middle_east/6206777.stm (quoting a statement from France’s Foreign Minister, Philippe Douste-Blazy, that “our objective remains convincing Iran to conform with its international commitments”); Press Release, Sec. Council, Security Council Imposes Sanctions on Iran for Failure to Halt Uranium Enrichment, Unanimously Adopting Resolution 1737, U.N. Doc. SC 8928 (Dec. 23, 2006), available at http://www.un.org/News/Press/docs/2006/sc8928.doc.htm (citing Russia's UN ambassador Vitaly Churkin as saying Russia voted in favor of sanctions because it wants to send "a serious message" to Iran "to resolve the remaining concerns" over its nuclear program, and citing Chinese UN Ambassador Wang Guangya as stating that "[s]anctions were not the end, but a means to urge Iran to return to negotiations").


303. Farley, supra note 268; Parisa Hafezi, Iran Says to Install 3,000 Centrifuges at Natanz, REUTERS, Dec. 24, 2006.

304. Kerr, supra note 268.

ceremony accompanied by chants of “death to America” that Iran had made a dramatic leap forward in its nuclear program by beginning to enrich uranium on an industrial scale and declared a national holiday to celebrate that fact.307

Iran’s flouting of the resolutions is not surprising, as the total costs imposed on the Iranian leadership by the resolutions are far less than the costs it would expect to incur from complying with the resolutions’ demands. The ban on exporting sensitive technology to Iran is riddled with exceptions, including a large one for the Russian-built nuclear reactor at Bushehr.308 Notwithstanding the exceptions, the ban on exporting sensitive technology to Iran merely prohibits the rest of the world from helping Iran to develop nuclear weapons. While this is a step forward, “we won’t help” is quite different from “stop, or else.”

The asset freezes are expected to have limited immediate impact, as the Security Council’s deliberative process likely provided the targets sufficient advance warning to withdraw their overseas assets before the freezes were imposed.309 Still, for those targeted Iranian entities wishing to accomplish significant transactions with overseas buyers or sellers, the freezes could over time become a meaningful hindrance. The U.S. government is encouraging foreign governments and banks to interpret the resolutions’ financial restrictions as aggressively as possible,310 and the aggressive use of U.S. banking regulations even prior to the resolutions succeeded in deterring a few Western banks from doing business with Iran.311 But the resolutions’ financial restrictions are so limited in scope and full of exceptions that it is doubtful that even an aggressive implementation will have a significant coercive effect. In addition, while Resolution 1747’s ban on arms exports by Iran will hinder Iran’s ability to supply its terrorist proxies such as Hezbollah and Iraqi insurgents,312 and thus may usefully contribute to containing Iranian influence in the Middle East, arms sales have not been a major source of revenue for the Iranian regime and thus the ban is unlikely to contribute significantly to

308. See Burns, Conference Call, supra note 300.
309. See, e.g., David Cortright, Can Iran’s Nuclear Activities Be Thwarted?, USA TODAY MAG., May 1, 2006, at 24 (“News reports suggest that Iran is moving financial assets out of Western banks in anticipation of potential sanctions.”).
310. See Cooper & Weisman, supra note 300.
311. Id.
coercing or containing Iran's nuclear program. The weakness of the sanctions imposed by Resolutions 1737 and 1747 stands in stark contrast to major Russian and Chinese transactions with Iran that were unaffected by the sanctions and thus represent leverage lost.\textsuperscript{313}

Having spent vast sums to develop a nuclear weapons program, the Iranian leadership could hardly be expected to surrender it in exchange for removal of a very limited trade ban and asset freeze. This would be so even if the Iranian leadership perceived its self-interest in Western capitalist terms. The Iranian leadership, however, is motivated by nationalist and religious convictions that exalt values including martyrdom and suffering.\textsuperscript{314} In comparison with a purely economic calculation, the Iranian regime's ideology causes it to ascribe greater cost to complying with the sender's demand to shut down the nuclear weapons program and lesser cost to any suffering that may be imposed by sanctions.

Resolutions 1737 and 1747 are also likely too weak to effectively contain Iran's nuclear weapons program. The complicated and exception-riddled ban on exporting sensitive nuclear technology to Iran will be far more difficult to enforce than would, for example, a comprehensive trade embargo. In particular, there is concern that Iran will use legal nuclear programs at Bushehr as a cover to continue to receive training and technology useful for its nuclear weapons program.\textsuperscript{315}

Similarly, the Resolution 1737 and 1747 sanctions are too weak to significantly change the cost-benefit calculations of, and thus deter, other countries that might be contemplating nuclear proliferation. A ban on trade in sensitive nuclear technology and limited asset freeze is simply not a sufficient disincentive. Indeed, less than two weeks after passage of Resolution 1737, Egyptian President Hosni Mubarak hinted that if Iran proceeds to attain nuclear weapons, his country will follow suit.\textsuperscript{316}

313. For example, Russia is in the process of delivering to Iran twenty-nine Tor-M1 anti-aircraft missile systems bought by Iran for $1.4 billion dollars. Russian Anti-Aircraft Weapons Sales to Syria, Iran on Schedule, AGENCE FRANCE PRESSE, Jan. 2, 2007. ITAR-TASS reports that "[t]he anti-aircraft systems are being stationed around Iran's civilian nuclear sites . . . ." Id. In addition, during the week prior to the passage of Resolution 1737, China's national oil corporation signed an agreement with Iran related to liquefied natural gas worth sixteen billion dollars. Burns, Conference call, supra note 300. Since Resolution 1737 did not involve fuel sanctions, it did not cover the Chinese-Iranian deal. Id. The Bushehr nuclear reactor which Russia is building in Iran and which was exempted from the sanctions is an $800 million project. Lynch, supra note 268.


315. See Lynch, supra note 268.

Resolutions 1737 and 1747 explicitly paved the way for consideration of future stronger sanctions, by committing the Council to adopting “further appropriate measures under Article 41” of the UN Charter “to persuade Iran to comply” in the event that the IAEA Director General’s report within sixty days were to find continuing noncompliance. However, these references to Article 41 may also have reduced pressure on the Iranian leadership. In appearing to limit future additional sanctions to measures adopted under Article 41 of the UN Charter, Resolutions 1737 and 1747 seem to be ruling out Article 42 military sanctions against Iran.

In the meantime, Iran is moving aggressively toward nuclear weapons capability and may well achieve that capability before the sanctions are ramped up to a level sufficient to coerce or contain it.

The United States has emphasized Resolution 1737’s value as a legal foundation upon which some senders will be able to build additional stronger sanctions. As Under Secretary Burns put it:

As we worked over the last 18 months to try to convince countries to be more vigorous on their own, using their own legal systems or institutions such as the European Union to take more vigorous action, the constant refrain to us was, well, we can’t do that because the UN Security Council hasn’t established a sanctions regime. That has now happened [and] opens the way for further action outside the Security Council by states that wish to send a more clear and a tougher measure to the Iranians.

A comprehensive boycott of Iran by the European Union, which supplies forty-four percent of Iran’s imports, might quickly succeed in coercing Iran to cease its nuclear weapons program. As of April 2007, however, there was no sign that the European Union planned to impose vigorous additional sanctions against Iran.

318. See Howard LaFranchi, Will EU and US Be Tougher Now on Iran?, CHRISTIAN SCI. MONITOR, Dec. 27, 2006, at 1 (quoting nonproliferation expert Henry Sokolski as saying that “[s]o much has been grandfathered and exempted [by the resolution] that what can be looked at in 60 days won’t be that interesting”). Following the vote, the French ambassador was asked by the media: “You say, Ambassador, that if Iran doesn’t comply, the Security Council is determined to act. Does that keep the military option open?” The French ambassador responded: “No, no, it is clear that in this case new measures will be taken under Article 41 of Chapter 7.” Media Stakeout, FED. NEWS SERV., Dec. 23, 2006.
319. Burns, Conference Call, supra note 300.
Resolutions 1737 and 1747 also did not attempt retributive punishment of the Iranian leadership, nor did they achieve such punishment. Depriving Iran of a few nuclear technology exports and placing a foreign asset freeze on a handful of its nuclear program officials and entities is surely not proportional to the grave harm done by Iran to the international community's interests in nuclear nonproliferation. In addition, in light of the Iranian regime's exaltation of suffering and martyrdom, the very notion of imposing suffering on it in order to achieve retribution may be fundamentally misconceived.

Resolutions 1737 and 1747 are "textbook example[s] of targeted sanctions." The resolutions target Iranian officials directly involved in Iran's sensitive programs while avoiding placing any hardships on ordinary Iranians and consequently provide the Iranian populace with little incentive to pressure the regime into compliance. The resolutions also aim to deny Iran access to specific products necessary to the conduct of its objectionable policy. However, Resolutions 1737 and 1747 make far from full use of the menu of targeted sanctions. There is no ban on arms or refined petroleum sales to Iran, and even those sanctions that are imposed are strikingly narrow in scope. For example, Resolutions 1737 and 1747 focus sanctions on a handful of Iranian officials at the implementation level of the nuclear weapons program, leaving untouched the decisionmakers in charge of Iran's nuclear weapons policy. Even with respect to those officials subjected to sanctions, the resolutions impose asset freezes but not travel bans. In addition, the ban on sensitive nuclear exports to Iran is so complex and full of exceptions as to likely render it nearly ineffective. The Resolution 1737 and 1747 sanctions thus suffer from the characteristic deficiency of targeted sanctions: even if implemented to maximum effect, they are highly unlikely to impose sufficient costs to achieve their purposes.

321. For example, the Russian Foreign Minister insisted that the resolution should help "start talks with Iran, rather than punish Iran." Colum Lynch, Europeans Yield on Iran Sanctions, WASH. POST, Dec. 21, 2006, at A24.
323. Press Release, U.S. Mission to the United Nations, Statement by Ambassador Alejandro Wolff, Acting U.S. Permanent Representative to the United Nations, Adoption of Security Council Resolution 1747 on Iran, USUN Press Release 064(07) (Mar. 24, 2007), available at http://www.un.int/usa/07_064.htm ("[T]hese measures we are adopting today are in no way meant to punish the civilian population of Iran. Resolution 1747 is properly tailored to target Iranian institutions and officials that support Iran's nuclear and missile programs.").
324. Karimi, supra note 305 (noting that Saeed Laylaz, an Iranian political commentator, said that "Iranians would continue to shrug off" the sanctions "until [they] hit normal Iranians," and that "the drafters of the U.N. resolution went to great pains to point out that they did not").
D. India/Pakistan

The nuclear nonproliferation regime has been undermined not only by the international community’s failure to seriously sanction important North Korean, Iranian, and rampant procedural violations of the NPT, but also by its failure to seriously sanction two sets of actions gravely destructive of the nuclear nonproliferation regime even though they did not technically violate the NPT: the 1998 Indian and Pakistani nuclear detonations.

India detonated a single nuclear explosive device in 1974 but insisted the test was a “peaceful nuclear explosion,” and for many years did not turn the technology demonstrated during the test into a nuclear weapons program.

India changed course in May 1998, after the election of Prime Minister Atal Behari Vajpayee, when it set off five nuclear explosions and declared itself a nuclear weapons state. Vajpayee had come to power at the head of the Hindu nationalist Bharatiya Janata Party (BJP). George Perkovich, in his meticulously researched *India’s Nuclear Bomb*, concludes that domestic political considerations, rather than national security concerns, drove the Vajpayee government’s decision to test—indeed, Perkovich says the test “had no articulated strategic or doctrinal necessity.” These domestic considerations included the desire of the fervently nationalist new Prime Minister to “satisfy the BJP’s hard-line base” by “asserting the BJP’s uniqueness” through “mak[ing] the new government’s mark.” Another major factor in the decision to test was the personal ambition of “retirement-aged” Indian nuclear scientists to cap their careers and “prove their brilliance and prowess.”

The Indian tests occurred on May 11 and 13, 1998. After India tested, Vajpayee proudly stated, “We have a big bomb now.” Vajpayee subsequently told a reporter: “The greatest meaning of these tests is that they have given India *shakti* [a Vedic concept of the liberation of energy], they have given India strength, they have given India self-

325. Perkovich, supra note 5, at 178.
326. See id.; Graham, supra note 57.
328. Perkovich, supra note 5.
329. Id. at 447, 449.
330. Id. at 409.
331. Id. at 447–48.
332. Id. at 420.
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confidence." Vajpayee declared to India’s Parliament that nuclear weapons were "India’s due...the right of one-sixth of humankind." In the days following the Indian tests, the Clinton administration worked to dissuade Pakistan from responding with its own nuclear blasts. Pakistani Prime Minister Nawaz Sharif made his reluctance to order Pakistani tests clear, telling Pakistani television on May 16 that "[t]he ideal thing would still be that Pakistan doesn’t have to follow suit." The Pakistani Finance Minister warned against testing, suggesting that the resultant sanctions could devastate the Pakistani economy. Prime Minister Sharif said on May 17 that he would order tests only "if the international community takes no action against India," but noted that "[t]he initial reactions from countries have either been nil or very mild." Indeed, the United States had to lobby hard simply to get the G-8 group of leading industrial countries to use the word "condemn" in a joint statement about the Indian tests a week after they occurred. The G-8’s failure to take serious action against India strengthened the hand of hard-liners in Sharif’s cabinet who advocated an immediate nuclear test. President Clinton personally phoned Prime Minister Sharif five times to offer incentives and advise of the sanctions the United States would be required by law to impose if Pakistan proceeded with testing.

In a telephone conversation the night before Pakistan tested, Sharif told Clinton, “You have said all the right things, but the rest of the world is filing its fingernails.” Sharif explained that the failure of most of the world to punish India for its detonations made it impossible for him not to follow suit. The international community’s weak response to India’s

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333. Id. at 443 (quoting Vajpayee’s statement in Prabhu Chawla, Interview with Prime Minister Vajpayee, INDIA TODAY, May 25, 1998).
334. HYMANS, supra note 327, at 202.
337. Kinzer, supra note 335.
341. Id.
342. Id. A few days before, Pakistani Information Minister Mushahid Hussain, speaking on CBS’s “Face the Nation,” had criticized a mid-May meeting of the G-8 group of leading industrialized countries for failing to adopt sanctions against India, describing the G-8 decisions on India as “just a mild slap on the wrist, which means that there’s no price tag for bad behavior,” and that “[w]e feel that India is getting away with it all.” Balz, supra note 339. See
nuclear tests contributed to, and left Sharif unable to face down, “overwhelming domestic political pressures” to test.\textsuperscript{343} Pakistan responded to the Indian nuclear blasts with its own on May 28 and 30, 1998.\textsuperscript{344}

Although India and Pakistan were not NPT members, their tests did serious damage to the nuclear nonproliferation regime. George Bunn condemned the tests as having “violated a global norm against any more countries with nuclear weapons,” and asserted that “[i]f this norm is to be preserved, violators must suffer serious consequences or the norm will become a paper tiger.”\textsuperscript{345} “Just as national laws will be weakened by failure to enforce them,” said Bunn, “violation of international norms must produce serious consequences for the violators or others will choose the same path.”\textsuperscript{346} Deputy Secretary of State Strobe Talbott, the chief U.S. interlocutor with India and Pakistan following the tests, stressed that, in the wake of the detonations, sanctions would “create a disincentive for other states to exercise the nuclear option [and] keep faith with the much larger number of nations that have renounced nuclear weapons despite their capacity to develop them.”\textsuperscript{347}

Despite the high stakes, and regardless of the Security Council’s broad authority and stated intention to act decisively, the international community’s response to the nuclear detonations by India and then Pakistan was extremely weak. As discussed in Part III, the Security Council had already asserted the legal authority in 1992 to sanction any proliferant activity, regardless of whether that activity violated the NPT or any other legal instrument. Yet the Security Council imposed no sanctions in response to the detonations.

The Security Council responded to the detonations in two statements by the President of the Security Council\textsuperscript{348} (one after each state tested)

\textsuperscript{343} See John F. Burns, \textit{Nuclear Anxiety: The Overview; Pakistan, Answering India, Carries Out Nuclear Tests; Clinton’s Appeal Rejected}, N.Y. TIMES, May 29, 1998, at A1 (noting that Pakistani Foreign Minister Gohar Ayub Khan and other Pakistani leaders “strongly hinted that the strength of the world’s response” to India’s tests “would shape their decision on whether to detonate nuclear bombs of their own”).

\textsuperscript{344} \textit{Id.}

\textsuperscript{345} Bunn, \textit{supra} note 58.

\textsuperscript{346} \textit{Id.}


and one Security Council resolution. Both statements "strongly de-

plore[d]" the tests and urged "restraint" and "dialogue." The
resolution, issued nearly a month after the Indian tests and a week after
Pakistan tested, "reiterat[ed]" that "the proliferation of all weapons of
mass destruction constitutes a threat to international peace and secu-

rity," and expressed grave concern about the tests, but imposed no
sanctions. The closest the resolution came to imposing a substantive
consequence was its nonbinding statement that it "encourages all States
to prevent the export" to India and Pakistan of equipment, materials, or
technology that "could in any way assist" their nuclear weapons pro-
grams. In spite of the grave damage done to the nuclear nonproliferation regime by India for reasons of clearly minor import to
the Indian national interest, the Security Council could not even bring
itself to ban exports to India of nuclear equipment, materials, and tech-
nology.

The G-8 countries eventually did oppose some new lending to India
and Pakistan by the International Monetary Fund, the World Bank, and
the Asian Development Bank. However, the G-8 decision was taken at
a meeting on June 12, 1998, a full month after India's tests, and two
weeks after Pakistan tested. In addition, the G-8 sanctions were so full of
loopholes that their deterrent effect on potential future proliferators was
undermined. For example, the lending prohibition excluded "humanitar-
ian" projects. Furthermore, the sanctions affected only new
commitments, not disbursements of previously agreed loans; as a re-
result, the actual flow of money from these institutions to India and
Pakistan was not to be affected for several years thereafter, by which
time the sanctions had been lifted. Pakistan, with a much weaker
economy, felt the sanctions' impact on private sector activity (a largely

349. S.C. Res. 1172, supra note 12.
351. S.C. Res. 1172, supra note 12, at pmbl.
352. Id. See supra text accompanying notes 226-232 for a description of the range of sanctions imposed by the Security Council in other cases.
353. S.C. Res. 1172, supra note 12, ¶ 8.
357. Id. at 6.
358. Id.
359. Id. at 10.
psychological impact on investor confidence) more deeply than India, even though India had tested first and was thus more deserving of sanctions.

Individual countries also responded weakly to the detonations. Fourteen countries suspended bilateral aid to India and Pakistan, but only the U.S. and Japanese assistance was of significant magnitude, and none of the other permanent members of the Security Council cut off either trade or bilateral aid. Five days after India completed testing, Russian Nuclear Energy Minister Yevgeny Adamov announced that the tests would not affect Russia's plan to enter into a $2.6 billion contract for construction of a nuclear power station in India. Adamov declared that to do otherwise "would be similar to sanctions, which is not Russia's stand towards India." On July 23, 1998, Russia concluded a new military cooperation agreement with India, including a broad range of major weapons sales central to a planned $14–16 billion in Russian arms sales to India over the ensuing decade. In refusing to impose sanctions, French President Jacques Chirac stated: "We can see that the tests occurred, and therefore the threat of sanctions did not work. We have to talk together, and then talk to India and Pakistan, in a more understanding way, even as we make clear that we disapprove of what they have done." The United Kingdom refused to impose sanctions on India because of its historic ties to that nation.

The United States spearheaded international condemnation of the tests and imposed economic sanctions tougher than those imposed by

360. Id. at 10–12.
361. Id. at 5.
362. Id.
367. Jim Hoagland, Incentives Considered To End Tests In S. Asia, Wash. Post, May 30, 1998, at A1. Chirac was either unaware of or ignored the fact that the fear of sanctions had contributed significantly to deterring Indian officials from testing between 1974 and 1998. See infra Section V.C. Chirac's statement that "the tests occurred, and therefore the threat of sanctions did not work," clearly ignored the fact—evident from Pakistani public statements—that had sanctions been more robust following India's 1998 detonation, they may well have convinced Pakistan not to test despite its many strong reasons to respond to India's tests with some of its own.
any other country. Yet even the U.S. sanctions were less than whole-hearted from the very beginning.\textsuperscript{369} Several sanctions were triggered by existing U.S. laws\textsuperscript{370} that had never before been implemented, requiring the Clinton administration to determine how the laws would be put into effect. In making those determinations, the Clinton administration “made a number of decisions to moderate the sanctions’ effect.”\textsuperscript{371} Then, two months after India’s first test, nuclear nonproliferation took a back seat as Congress passed legislation modifying the sanctions to exempt U.S. government agricultural credits.\textsuperscript{372} President Clinton immediately signed the bill into law, saying it would help avoid “undue burdens on our farmers” and that “we should look for ways to expand our agricultural exports, not restrict them.”\textsuperscript{373}

The next major step in the dismantlement of the U.S. sanctions was the enactment in October 1998 of the India-Pakistan Relief Act,\textsuperscript{374} which authorized the president to waive many of the remaining sanctions. President Clinton quickly exercised that authority.\textsuperscript{375} The following year, Congress granted the president broader waiver authority, which he exercised in October 1999.\textsuperscript{376} Ultimately, the U.S. sanctions succumbed to a combination of factors, including lobbying by U.S. companies with business interests in India and Pakistan, fear of instability in Pakistan, the failure of most other countries to join the United States in imposing significant sanctions, and pressure from the Indian-American community.\textsuperscript{377} The last of the nuclear nonproliferation sanctions on India and Pakistan were lifted in the wake of the September 11, 2001 attacks.\textsuperscript{378}

\begin{itemize}
\item \textsuperscript{370} See \textit{Arms Export Control Act} § 102(b), 22 U.S.C. § 2799aa-1(b) (1994) (popularly known as the Glenn Amendment) (providing for various sanctions on “a non-nuclear-weapon state” that “detonates a nuclear explosive device”); \textit{Export-Import Bank Act} of 1945 § 2(b)(4), 12 U.S.C. § 635(b)(4) (2006) (providing for sanctions on a non-nuclear-weapon state that “has detonated a nuclear explosive device . . . but is not a nuclear-weapon state”).
\item \textsuperscript{371} Diamond, \textit{supra} note 369.
\item \textsuperscript{372} \textit{Id.}
\item \textsuperscript{373} William J. Clinton, President of the United States, Statement on Signing the Agriculture Export Relief Act of 1998 (July 15, 1998), \textit{available at} http://www.presidency.ucsb.edu/ws/index.php?id=56305.
\item \textsuperscript{376} See \textit{Dianne E. Rennack}, CONG. RESEARCH SERV., CRS REPORT FOR CONGRESS: \textit{INDIA AND PAKISTAN: CURRENT U.S. ECONOMIC SANCTIONS} 3 (2002).
\item \textsuperscript{377} See, e.g., Hathaway, \textit{supra} note 375.
\item \textsuperscript{378} See Rennack, \textit{supra} note 376, at 4.
\end{itemize}
The failure of the international community to impose significant sanctions in response to the Indian and Pakistani detonations undermined the nuclear nonproliferation regime by sending a strong message to potential proliferators that the price for proliferating is low. The Bush administration’s recent nuclear cooperation agreement with India further undermined the regime. In implementation of the agreement, the administration sought and received from Congress changes to the U.S. laws that prohibit transfer to non-NPT parties of a range of nuclear technologies and materials. The laws were changed so as to exempt from the ban U.S. exports of civilian nuclear technology to India.

The U.S. decision to engage in civil nuclear cooperation with a nuclear-armed, non-NPT member such as India undermines the basic NPT bargain made by NNWS to forswear nuclear weapons in exchange for receiving civil nuclear cooperation. The U.S.-India agreement makes the NPT look less like a reciprocal bargain and more like a discriminatory trap for those NNWS parties prohibited by their NPT membership from following the Indian example and obtaining both nuclear weapons and civil nuclear cooperation. Indeed, some of the language in the U.S.

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381. Kuppuswamy, supra note 19, at 141 (“The speakers at the Wilton Park Conference feared that in combination with U.S. attempts to deny Iran, which is a signatory of the NPT, civilian nuclear technology, [the U.S. move towards nuclear trade with India] effectively destroys the NPT.”). One group of U.S. private sector experts on nuclear nonproliferation went so far as to write to members of Congress that the proposed U.S.-India nuclear deal would place the U.S. in violation of the NPT Article I ban on “in any way” assisting any state other than an NPT NWS “to manufacture or otherwise acquire nuclear weapons.” See Letter from Thomas Cochran, Dir., Natural Res. Def. Council Nuclear Program, et al. to Members of Congress (June 20, 2006), available at www.npec-web.org/Essays/20060620-LetterOnArticleOne.pdf.


383. Id.

384. U.S. officials respond to these concerns by maintaining that the U.S.-India agreement commits India to proliferation control measures comparable to those India would be subject to as an NPT party. See Nicholas Burns, Under Sec’y of State for Political Affairs, Briefing on the Signing of the Global Partnership Agreement Between the United States and India, U.S. Dep’t of State Press Briefing No. 2005/715 (July 19, 2005), available at http://www.state.gov/p/us/rls/2005/49831.htm. However, former IAEA Deputy Director General
government's announcement of the U.S.-India nuclear deal seemed almost designed to erode the nuclear nonproliferation norm. For example, the State Department "fact sheet" describing the deal stated that the "agreement to reach full civil nuclear cooperation brings India into the international nonproliferation mainstream."\(^{385}\) If India can be brought "into the international nonproliferation mainstream" without becoming a party to the NPT, where does that leave the NPT? Ali Larijani, Iran's top nuclear negotiator and secretary of the Iranian National Security Council, recently noted: "India does not accept the NPT and has nuclear weapons. But America has no problem with this and is also concluding a long-term nuclear energy agreement with India."\(^{386}\) As an Egyptian analyst told the *New York Times* in regard to a proliferation-threatening proposal that Egypt pursue a nuclear program, "Why should the U.S. assist India in its nuclear program and not Egypt?"\(^{387}\)

## V. Examples of Sanctions or the Prospect of Sanctions Impeding Nuclear Weapons Programs

This Part examines three cases in which sanctions or the prospect of sanctions contributed to stopping or slowing the progress of a country's nuclear weapons program. The first example is Iraq, where, as the world has learned, UN sanctions succeeded in preventing Saddam Hussein from reconstituting his nuclear weapons program following the Gulf War in 1991. The second example is Libya, which was heavily influenced by UN sanctions in its decision to renounce terrorism and by U.S. sanctions in its decision to dismantle its nuclear weapons program. The third

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Pierre Goldschmidt has criticized the proposed U.S.-India nuclear cooperation agreement as "granting India all the benefits that are reserved for non-nuclear weapon States under the NPT, without requesting from India any real counterbalancing commitment." Goldschmidt, *supra* note 77, at 6. Goldschmidt suggests that if the United States goes ahead and curbs the NSG export rules "for what the US has unilaterally defined as the 'special case' of India, it is hard to see why Russia, China and others would not feel free to strike similar deals with countries such as Pakistan and Iran." *Id.* at 7. Indeed, the U.S.-India deal is seen in Moscow "as a victory of US geopolitical and economic policy considerations over strengthening the NPT [and] many in Moscow would consider Russia entitled to its own foreign policy priorities, which in some cases may be higher than enhancing the NPT." Arbatov, *supra* note 272.


example is India, which was deterred by the prospect of international sanctions from testing nuclear weapons between 1974 and 1998.

A. Iraq

In the wake of the occupation of Iraq by coalition forces in April 2003, it has become clear that sanctions were extremely effective in coercing and containing the Iraqi government with respect to its nuclear weapons program. The U.S. government’s extraordinary access to Iraqi territory, documents, officials, and scientists has informed two extremely thorough and dispassionate reports. The Iraq Survey Group issued one such report after leading the U.S. government’s fruitless post-war efforts to find Iraqi weapons of mass destruction, an effort that included numerous site visits, interviews with captured persons associated with WMD programs, and review of millions of pages of captured Iraqi documents. 388 The U.S. Joint Forces Command undertook another comprehensive study of the inner workings and behavior of Saddam’s regime, based on interviews with dozens of captured senior Iraqi military and political leaders and review of thousands of official Iraqi documents. 389

Iraq was an original party to the NPT. 390 In the 1970s, however, Iraq built facilities, including the Osirak nuclear reactor, that potentially allowed it to produce weapons-grade fissile material. 391 The Israeli Air Force destroyed the Osirak reactor in June 1981. 392 In the late 1980s, Iraq resumed serious efforts to develop a nuclear infrastructure, and following its invasion of Kuwait in August 1990, Iraq began an expedited program “to produce a nuclear weapon.” 394

391. See 2 Iraq Survey Group Report, supra note 388, Nuclear at 3 (section begins after Delivery Systems).
393. 2 Iraq Survey Group Report, supra note 388, Nuclear at 3.
394. Id. at 4.
Coalition forces liberated Kuwait in February 1991. On April 3, 1991, the UN Security Council adopted Resolution 687, which, among other things, ordered that Iraq: 1) not "acquire or develop nuclear weapons or nuclear-weapons-usable material" or related items; 2) "place all of its nuclear-weapons-usable materials under the exclusive control, for custody and removal" of the IAEA; 3) submit to "urgent on-site inspection and the destruction, removal or rendering harmless as appropriate" of specified nuclear-related items; and 4) submit to "future ongoing monitoring and verification" of Iraq's compliance with the aforementioned requirements. The resolution imposed similar requirements for chemical weapons, biological weapons, and certain ballistic missiles. Resolution 687 also specified that the comprehensive economic sanctions imposed on Iraq following its invasion of Kuwait would be lifted only upon Security Council agreement that Iraq had completed all actions required by the resolution with respect to nuclear, chemical, and biological weapons and ballistic missiles.

Inspectors operating under Resolution 687 and subsequent resolutions eventually determined that Iraq, for more than a decade before the invasion of Kuwait, had been pursuing "a secret nuclear weapon programme completely separate from its civil nuclear programme declared to and inspected by the IAEA." Indeed, Iraq "was only six months away" from a nuclear weapon at the time of its eviction from Kuwait. While Iraq's nuclear facilities were damaged during the first Gulf War, it was the rigorous inspections and sanctions that followed the war, in combination with the 1995 defection of key Iraqi weapons official Hussein Kamel, that managed to complete the destruction of Iraq's nuclear

397. Id. ¶¶ 8–10.
398. Id. ¶ 22.
401. 2 IRAQ SURVEY GROUP REPORT, supra note 388, Nuclear at 4 (noting that "nearly all of the key nuclear facilities ... were bombed during Desert Storm" and describing the varying levels of damage suffered by specific key facilities).
402. See, e.g., Iraq: A Chronology of UN Inspections and an Assessment of Their Accomplishments, ARMS CONTROL TODAY, Oct. 2002, at 13, 15 [hereinafter Inspections Chronology] (noting that as a result of Kamel's defection, inspectors learned that "Iraq had weaponized biological agents, had a more advanced indigenous ballistic missile program than previously believed, had produced more chemical weapons than disclosed earlier, and had initiated a crash program in 1990 to try to acquire a nuclear weapon in less than a year.").
weapons program and keep Saddam from restarting it over the next dozen years.\textsuperscript{403}

The Iraq Survey Group Report found that “[a]ggressive UN inspections after Desert Storm forced Saddam to admit the existence of the [nuclear] program and destroy or surrender components of the program.”\textsuperscript{404} The report determined that “Iraq’s ability to reconstitute a nuclear weapons program progressively decayed” during the twelve years between Iraq’s expulsion from Kuwait in 1991 and the coalition occupation of Iraq in 2003.\textsuperscript{405} Charles Duelfer, the Iraq Survey Group’s second director, concluded that “the decay that occurred in the Iraqi [nuclear weapons] program was a function of the sanctions, and ... the extraordinary limits put on this regime [by] an extraordinary set of UN regulations.”\textsuperscript{406}

Implementing the inspections and enforcing the sanctions required persistence, ingenuity, and periodic military pressure by coalition forces in the face of Iraqi government stalling, evasion, obstruction, deception, and smuggling.\textsuperscript{407} Inspections nevertheless succeeded in “uncovering and eliminating Iraq’s nuclear weapons program and most of its chemical, biological, and ballistic missile systems.”\textsuperscript{408} David Kay, the Iraq Survey Group’s first director, found in retrospect that Iraq’s leadership was far more deterred by the fear of weapons inspections than the United States had realized.\textsuperscript{410} In addition, sanctions reduced the Iraqi government’s revenue, eroded Iraqi military capability and confidence, blocked the import of key materials and technologies for producing nuclear and other weapons of mass destruction, and provided the United Nations with leverage to compel intrusive inspections and monitoring.\textsuperscript{411} Rolf Ekeus, chief UN weapons inspector in Iraq from 1991 to 1997, put

\begin{itemize}
  \item \textsuperscript{403} 2 IRAQ SURVEY GROUP REPORT, supra note 388, Nuclear at 6 (noting that the Iraq Survey Group “uncovered no indication that Iraq had resumed fissile material or nuclear weapon research and development activities since 1991”).
  \item \textsuperscript{404}  Id. at 1.
  \item \textsuperscript{405}  Id.
  \item \textsuperscript{406}  Duelfer Testimony, supra note 379.
  \item \textsuperscript{407}  See, e.g., Inspections Chronology, supra note 402 (providing various examples of Coalition military action and threats which persuaded Iraq to cooperate with inspectors).
  \item \textsuperscript{408}  See Butler Interview, supra note 400 (providing specific examples of Iraqi deception); 2 IRAQ SURVEY GROUP REPORT, supra note 388, Nuclear, passim (noting that “Baghdad undertook a variety of measures to conceal key elements of its nuclear program from successive UN inspectors” and describing various such measures).
  \item \textsuperscript{409}  George A. Lopez & David Cortright, Containing Iraq: Sanctions Worked, FOREIGN AFF., July–Aug. 2004, at 90, 92.
  \item \textsuperscript{411}  Lopez & Cortright, supra note 409, at 91.
\end{itemize}
it as follows: “Keeping the sanctions was the stick, and the carrot was that if Iraq cooperated with the elimination of its weapons of mass destruction, the Security Council would lift the sanctions. Sanctions were the backing for the inspections, and they were what sustained my operation almost for the whole time.”

The inspections were so effective in part because they were far more intrusive than those authorized under the INFCIRC/153 safeguards agreement. For example, in Resolution 707, the Security Council ordered Iraq to “halt all nuclear activities of any kind, except for use of isotopes for medical, agricultural or industrial purposes” (e.g., halt all nuclear power-related activities). The resolution also mandated that Iraq allow IAEA inspectors “immediate, unconditional and unrestricted access to any and all areas, facilities, equipment, records and means of transportation which they wish to inspect.”

The Plan for Future Ongoing Monitoring and Verification of Iraq’s Compliance imposed by Security Council Resolution 715, “installed an elaborate network of radiological and chemical sensors, cameras, ground-penetrating radar, and other detection systems, bolstered by aerial surveillance and no-notice visits to weapons facilities by inspectors.”

Iraq forced a halt to the inspections in December 1998 and agreed to their resumption in late 2002 only under threat of U.S. military action. El Baradei reported to the Security Council on March 7, 2003 that the new round of inspections, at 141 sites over the course of three months, found “no evidence or plausible indication of the revival of a nuclear weapons programme in Iraq.” The Bush administration, in deciding to invade Iraq on March 20, 2003, disregarded these findings,

412. Id. at 96 (also describing several instances of inspectors “using the pressure of sanctions, and dangling the prospect that they might some day be lifted, to assure compliance”).
414. Id. ¶ 3(b).
417. Lopez & Cortright, supra note 409, at 94.
418. Inspections Chronology, supra note 402, at 17.
419. Id. at 18.
remaining convinced that Iraq still possessed weapons of mass destruction.\textsuperscript{422} The administration relied on assessments of Iraq’s intentions and worst-case assumptions about Iraq’s activities during the inspections hiatus.\textsuperscript{423} As Duelfer noted, reliance on Iraq’s intentions was colored by the fact that “fathoming the intentions of the regime ... really boils down to understanding one person—Saddam Hussein, who was the regime.”\textsuperscript{424} This made the task both easier, in that it necessitated an analysis of only one key target, and harder, in that a totalitarian dictatorship is nontransparent, ultimately guided not by an observable system of checks and balances but rather by the indiscernible contents of one man’s thoughts. “Even those closest to [Saddam] had mixed understandings of his objectives,” says Duelfer,\textsuperscript{425} and “[i]n fact, there was uncertainty among some of [Saddam’s] closer advisers about WMD and whether it even existed.”\textsuperscript{426}

Unlike the Libyans, North Koreans, and Iranians, who for years falsely claimed they did not have nuclear weapons programs, Saddam falsely claimed he did. As the authors of the Joint Forces Command study note:

When it came to weapons of mass destruction (WMD), Saddam attempted to convince one audience that they were gone while simultaneously convincing another that Iraq still had them. Coming clean about WMD and using full compliance with inspections to escape from sanctions would have been his best course of action for the long run. Saddam, however, found it impossible to abandon the illusion of having WMD, especially since it played so well in the Arab world.\textsuperscript{427}

\textsuperscript{422} Per David Kay, “virtually everyone in the United States intelligence community during both the Clinton and the current Bush administrations thought Iraq still had the illicit weapons.” Risen, supra note 410. See also, e.g., John Barry & Mark Hosenball, \textit{What Went Wrong}, \textit{Newsweek}, Feb. 9, 2004, at 24 (quoting the 2002 National Intelligence Estimate on Iraq as concluding that “Iraq has continued its weapons of mass destruction [WMD] programs in defiance of UN resolutions and restrictions” and that “most analysts” believed Iraq was “reconstituting its nuclear weapons program”).\textsuperscript{423} See Barry & Hosenball, supra note 422 (“Once U.N. inspectors left Iraq, Saddam’s malevolent history and intentions took on even greater significance, because the CIA was suddenly cut off from a critical source of information.”).\textsuperscript{424} Duelfer Testimony, supra note 379.\textsuperscript{425} Id.\textsuperscript{426} Id.\textsuperscript{427} Woods et al., supra note 389, at 5–6.
While the Bush administration on the eve of war in 2003 asserted that inspections and sanctions had been ineffective and Iraq still had WMD, post-war investigations reveal that the inspections and sanctions had for a decade successfully derailed Iraq’s WMD program. However, the inspections and sanctions regime may have been on the verge of collapse in 2003. The reasons for the impending collapse, including a decrease in international support for the sanctions, are thoroughly detailed in both the U.S. government’s Iraq Survey Group Report and the 2005 report of an independent, high-level inquiry committee appointed by UN Secretary General Kofi Annan to investigate the administration and management of the Oil-for-Food Programme in Iraq.

The Iraq Survey Group Report, IIC, and other investigations reveal that Saddam had succeeded in grossly manipulating the sanctions regime. The Iraqi government generated billions of dollars in illicit revenue from abuses of the sanctions regime. It used some of that revenue to undermine support for sanctions by bribing foreign and UN officials, and it used other revenue to go “on a palace and mosque building spree in the late 1990s, employing 7,000 construction workers.” At the same time, Saddam theatrically exaggerated the impact of

428. See, e.g., Duelfer Testimony, supra note 379. Duelfer states:

Over time, sanctions had steadily weakened to the point where Iraq in roughly the 2000 to 2001 time frame was confidently designing missiles around components that could only be obtained outside of sanctions . . . . The sanctions were in free fall. They were eroding . . . . There was a crisis in the Security Council . . . . [T]he circumstances which allowed the inspectors to be successful to the extent that they were—I don’t think those conditions were sustainable.

Id.

429. Indep. Inquiry Comm. into the U.N. Oil-for-Food Programme, About the Committee, http://www.iic-offp.org/about.htm. The Independent Inquiry Committee (IIC) was chaired by Paul Volcker, former Chairman of the United States Federal Reserve, and included Richard Goldstone of South Africa, former Prosecutor of the International Criminal Tribunals for the former Yugoslavia and Rwanda. Id.


432. 1 IRAQ SURVEY GROUP REPORT, supra note 388, Regime Strategic Intent at 21 (first section in volume).
the sanctions on average Iraqis and blamed the sanctions for depriving the average Iraqi of resources Saddam was himself siphoning off. These reports make clear in retrospect that, especially after 1996, when the Oil-for-Food Programme was implemented, the vast majority of the suffering attributed to sanctions was due to the Iraqi regime’s manipulations and not the sanctions themselves. Future sanctions designed to replicate the Iraq sanctions’ success in halting Saddam’s nuclear weapons program must avoid both harm to innocent civilians and the potential for manipulative behavior by the target country’s leadership. Important lessons in this regard are contained in the IIC Report and a detailed U.S. Government Accountability Office (GAO) report on the Oil-for-Food Programme.

B. Libya

Libya announced on December 19, 2003 that it had “decided of its free will to get rid of [WMD] materials, equipment and programs, and to become totally free of internationally banned weapons.” The announcement capped months of secret negotiations between Libya, the United Kingdom, and the United States. Libya proceeded to allow a

433. See, e.g., David Rieff, Were Sanctions Right?, N.Y. TIMES MAG., July 27, 2003, at 41 (describing numerous examples of how “Saddam Hussein orchestrated a kind of traffic in suffering—all meant for the television cameras,” including ordering hospitals to accumulate children’s corpses in the morgue until “a sufficient number of bodies accumulated” and then “authorities would stage a mass funeral, railing against the sanctions, even though as often as not there was no connection between a particular child’s death and the sanctions.”). 434. See, e.g., KENNETH KATZMAN & CHRISTOPHER M. BLANCHARD, Cong. Research Serv., CRS Report For Congress: Iraq: Oil-for-Food Program, Illicit Trade, and Investigations 6 (2006) (“There is a consensus among U.N. officials and outside observers that the [Oil-for-Food-Program] eased substantially, but did not eliminate, severe economic hardship in Iraq.”); INDEP. INQUIRY COMM. INTO THE U.N. OIL-FOR-FOOD PROGRAMME, THE IMPACT OF THE OIL-FOR-FOOD PROGRAMME ON THE IRAQI PEOPLE 177–78 (2005), available at http://www.iic-offp.org/documents/Sept05/WG_Impact.pdf (crediting the Oil-for-Food Program with “preventing widespread hunger,” concluding that the “likelihood of reduced mortality is indicated,” and noting that child mortality rates in Iraq were extraordinarily high before the imposition of sanctions).


team of British and American government experts to enter the country and completely dismantle its WMD infrastructure by April 2004. 438 The U.S.-U.K. team shipped out of Libya more than 1,000 tons of sensitive documents and nuclear and missile components. 439 The inspection team also watched as more than 3,200 unfilled chemical weapons shells were laid out in the Libyan desert and crushed by tanks and bulldozers. 440

Libya’s announcement that it was relinquishing its WMD programs came four months after its agreement, also with the United Kingdom and United States, to accept responsibility for the 1988 bombing of Pan Am Flight 103 over Lockerbie, Scotland, and pay $2.7 billion in compensation to victims’ families. 441 Both the WMD and the Pan Am 103 concessions resulted from a combination of economic sanctions, effective intelligence gathering, and the implicit threat of force. The dramatic success of the effort to convince Libya to live up to its international obligations contains important lessons.

Muammar Qaddafi came to power in a 1969 coup. 442 During the 1970s and early 1980s, Libya was reportedly involved in the killing of Israeli athletes at the 1972 Munich Olympics and the assassination in 1973 of a U.S. ambassador to Sudan; 443 allegedly provided aid to terrorist groups including the Irish Republican Army, the Palestinian Abu Nidal organization, Italy’s Red Brigades, the Japanese Red Army, Spain’s ETA Basque separatists, and West Germany’s Baader-Meinhoff Gang; 444 was accused by President Reagan of dispatching assassination teams to murder top U.S. officials; 445 and sent troops into Chad in 1983 with the aim of overthrowing its government. 446 The United States responded by

439. Id.
440. Id.
443. Id.
444. See id.; Scott Anderson, The Makeover, N.Y. TIMES MAG., Jan. 19, 2003, at 28 (during Anderson’s interview with Qaddafi, Qaddafi appeared to admit his support for “armed action” by the Irish Republican Army); Ray Takeyh, The Rogue Who Came in from the Cold, FOREIGN AFF., May/June 2001, at 62, 68; see also Milton Viorst, The Colonel in His Labyrinth, FOREIGN AFF., Mar.—Apr. 1999, at 60, 66–67 (when the Viorst asked Qaddafi “if Libya was responsible for the many terrorist incidents of which it was accused in the 1980s,” Qaddafi “issued no denial,” instead stating: “These incidents that you mention belong to the past,” and “[a]ll these things are of the past, an era that is over.”).
banning arms sales to Libya beginning in 1978, limiting dual-use exports to Libya beginning in 1979, closing Libya’s embassy in Washington from May 1981 on, and limiting aviation exports to Libya beginning in October 1981.447 Beginning in 1982, the United States banned crude oil imports from Libya and restricted exports to Libya of sophisticated oil and gas drilling equipment.448 Finally, in January 1986, President Reagan barred most remaining U.S. trade and financial transactions with Libya and froze Libyan government assets in U.S. banks.449

These unilateral U.S. economic and diplomatic sanctions failed to moderate Libya’s terrorist activities. Because Libya remained free to trade with the rest of the world, the cost of the sanctions to Libya remained small. Libya was reportedly involved in sixty terrorist attacks between 1981 and 1986, fifty-two of which were between 1984 and 1986.450 One such attack occurred on April 5, 1986, when a bomb exploded in the La Belle Disco in West Berlin, a known gathering place for U.S. military personnel.451 Three people, including two U.S. soldiers, were killed, and seventy Americans were wounded.452 On April 13, 1986, following a West German announcement that it found “incontrovertible evidence” of Libyan involvement in the disco attack,453 the United States launched an air strike against Qaddafi’s residence and various other Libyan locations.454 This one-time airstrike also did not succeed in moderating Libya’s terrorist activities.455 On December 21, 1988, a Libyan bomb destroyed Pan Am Flight 103 over Lockerbie, Scotland, killing 270 people,456 and on September 19, 1989, a Libyan bomb destroyed a French airliner, UTA Flight 772, over Niger, killing all 171 persons onboard.457

In November 1991, after issuing indictments in the Pan Am 103 case, the U.K. and U.S. governments demanded that Libya surrender for trial the two Libyan government officials charged with the crime, accept responsibility for their actions, disclose information and evidence re-

448. Id.
449. Id.
451. Id. at 5.
452. Id.
453. Id.
454. Id.
455. Id. at 9.
457. Id.
garding the crime, pay appropriate compensation, and commit to ceasing all forms of terrorist action and all assistance to terrorist groups. In January 1992, the Security Council adopted Resolution 731, which condemned the Pan Am 103 and UTA 772 bombings and urged Libya to comply with French, British, and U.S. requests relating to the attacks. In March 1992, the Security Council, in response to Libya’s failure to comply with Resolution 731, adopted Resolution 748, which ordered Libya to comply with the requests and imposed various sanctions on Libya until such compliance occurred. The sanctions included a ban on flights destined for or originating in Libya; a ban on the supply of aircraft, aircraft parts, or servicing to Libya; and an arms embargo.

The UN sanctions had an immediate impact on Libya’s willingness to comply with its obligations relating to Pan Am 103. For example, Libya, which had previously ruled out extraditing the bombing suspects, now offered to turn them over to a third country such as Germany or Switzerland. Still, in light of Libya’s refusal to comply fully, the Security Council tightened sanctions in November 1993 by passing Resolution 883, which included a freeze on various Libyan assets abroad and a prohibition on the export to Libya of oil pumping, transport, and refining equipment.

The strong, universal sanctions imposed on Libya by the Security Council in 1992 and 1993 were followed by a dramatic reduction in Libyan support for terrorism. The Qaddafi regime moved to end its support for terrorist organizations, including by expelling the Abu Nidal organization and extraditing suspected terrorists to various countries. Indeed, there have been no reported acts of Libyan sponsored terrorism since 1993.

Libya reached a compromise with the United States and the United Kingdom over the Pan Am 103 bombing suspects, and, on April 5, 1999, it transferred them to The Hague for trial. The United Nations suspended its sanctions a few days later, but the United States made clear

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461. Id.
463. See S.C. Res. 883, supra note 229.
464. See, e.g., Jentleson & Whytock, supra note 442, at 68.
465. Id.
466. Id. at 70.
that permanent removal of the UN sanctions would come only after Libya took certain additional steps, including compensation payments to the families of the Pan Am 103 bombing victims, acceptance of responsibility for the attacks, and renunciation of support for terrorism.\textsuperscript{468}

The trial of the two Libyan government officials concluded on January 30, 2001, with one suspect convicted of murder for the bombing and given a life sentence, and the other acquitted of all charges and released.\textsuperscript{469} Libya and lawyers for the families of the Pan Am 103 victims reached agreement in August 2003 that Libya would pay $2.7 billion in compensation ($10 million per victim),\textsuperscript{470} and Libya formally accepted responsibility for the bombing in a letter submitted to the Security Council.\textsuperscript{471} The Security Council lifted its sanctions on Libya on September 12, 2003.\textsuperscript{472}

The United States held firm, however, and made it clear that it would not lift its own sanctions until Libya addressed a number of remaining U.S. concerns, including with respect to Libya's nuclear, chemical, and biological weapons programs.\textsuperscript{473} Negotiations between the United Kingdom, United States, and Libya over Libya's WMD programs had already been secretly underway for months.\textsuperscript{474} The seizure in October 2003 of a ship bound for Libya carrying sophisticated nuclear technology purchased from the A.Q. Khan network, the key supplier to the Libyan nuclear weapons program—and the interception and subsequent sharing with Libya of a conversation about Libya's nuclear weapons program between Khan and the head of Libya's nuclear program—enabled the United States and United Kingdom to increase the pressure on Qaddafi.\textsuperscript{475} The discoveries provided proof of the sophistication and illicit nature of the Libyan nuclear program and made it clear that the United States would be satisfied with nothing less than its full dismantling.\textsuperscript{476}

Libya announced the deal to eliminate its WMD programs in brief statements by the Libyan Foreign Ministry and Qaddafi on December

\textsuperscript{469} Collins, supra note 450, at 14.
\textsuperscript{471} Barringer, supra note 441.
\textsuperscript{474} Peter Slevin & Glenn Frankel, Libya Vows to Give Up Banned Weapons; Bush and Blair Hail Results of Nine Months of Secret Talks, WASH. POST, Dec. 20, 2003, at A1.
\textsuperscript{475} Judith Miller, How Gadhafi Lost His Groove, WALL ST. J., May 16, 2006, at A14.
\textsuperscript{476} See Jentleson & Whytock, supra note 442, at 74.
19, 2003. In their own announcements that day, President Bush and British Prime Minister Tony Blair described in greater detail the contents of the agreement, which included elimination of Libya's nuclear, chemical, and biological weapons programs and immediate inspections and monitoring to verify these actions. On September 20, 2004, with the Libyan WMD programs completely and verifiably dismantled, President Bush lifted the U.S. trade embargo on Libya, and on May 12, 2006, the United States formally rescinded Libya's designation as a state sponsor of terrorism.

What accounts for the international community's success in convincing Libya to abide by its international obligations to forsake its support for terrorism and rid itself of weapons of mass destruction? Strong economic sanctions, the implicit threat of force, and effective intelligence gathering were all key elements.

Economic sanctions had a significant impact on the Libyan economy, especially after the Security Council made them universal. The sanctions' impact on Libya's ability to purchase replacement parts for its most sophisticated machinery crippled the Libyan air force and eventually ground down Libya's petroleum extraction industry. Production by Libya's oil industry declined from a peak of 3.3 million barrels a day in the late 1970s to 1.1 million in 1999. The World Bank estimated that the UN sanctions cost Libya eighteen billion dollars in oil revenue, and during this period the Libyan economy entered a long recession, resulting in thirty-percent unemployment and a fifty-percent inflation rate. The Qaddafi regime, which "depended for its survival on buying the

481. Collins, supra note 450, at 11.
482. Viorst, supra note 444, at 71–72 (quoting Hammouda el-Aswad, head of Libya's National Oil Corporation).
484. Collins, supra note 450, at 12.
485. Id.
population's acquiescence," became the target of demonstrations, "at least two military coup attempts and an Islamic insurgency."486 As with Iraq, the sanctions also reduced Libya's ability to develop WMD, including by making the process more time-consuming and expensive.487 Libya was unable to acquire a precursor chemical essential to the manufacture of binary chemical weapons,488 and top-quality suppliers refused to sell Libya certain dual-use technology it sought for its biological weapons program, ultimately forcing Libya to import "shoddy merchandise at exorbitant prices."489

The extent to which the U.S. war against Iraq impacted Libya's decisions to comply with its international legal obligations has been the subject of heated debate.490 As one prominent commentator stated in January 2004, "pundits are quick to claim that the leaders of Libya . . . are cooperating because they fear the same fate that befell Saddam Hussein [but] [t]here is little direct evidence to support this conclusion . . . . [I]t is money that matters."491 Three years later, however, sufficient evidence has surfaced to support a conclusion that the implicit threat of force had at least some impact on the Libyan leadership's decision to comply with its international obligations. For example, a declassified cable to Washington from the U.S. Embassy in Egypt dated September 20, 2001 conveyed reports from Egyptian and other Arab diplomats that, after September 11, a fearful Qaddafi called "every Arab leader on his Rolo-
dex," asking them to "weigh in with Washington."492 The cable stated that "Qadhafi had sounded hysterical in his telephone call to King Abdullah [of Jordan], as if only the King's personal intervention would prevent U.S. action."493 During these first few days following the September 11

486. Takeyh, supra note 444, at 65.
487. See Miller, supra note 438.
488. Miller, supra note 475.
489. Miller, supra note 438.
490. For a summary of the key protagonists and their positions, see Jentleson & Whytock, supra note 442, at 47-48. Jentleson and Whytock, in a thorough and balanced analysis, ultimately conclude that "force was a factor [but] not the only factor, though, and probably not the most important one." Id. at 75.
493. Id.
attacks, Libya turned over to the United States key intelligence information on al Qaeda.\textsuperscript{494}

Eighteen months later, as the United States and the United Kingdom prepared for their March 2003 invasion of Iraq, Muammar Qaddafi’s son, Saif al-Islam Qaddafi, secretly met with U.K. officials and conveyed to them his father’s readiness to make a deal on WMD.\textsuperscript{495} Three days later, on the day the war commenced, U.K. officials flew to Libya, met with Muammar Qaddafi himself, and received the same message.\textsuperscript{496}

In September 2003—one month after Libya entered into the compensation agreement with the Pan Am 103 families and three months before Libya’s public announcement that it would comply with its non-proliferation obligations—Qaddafi reportedly phoned Silvio Berlusconi, then Prime Minister of Italy, and said, “I will do whatever the Americans want, because I saw what happened in Iraq, and I was afraid.”\textsuperscript{497} Libya’s December 2003 WMD compliance announcement came just six days after Saddam Hussein’s humiliating capture by U.S. forces.\textsuperscript{498} In January 2004, Libyan Prime Minister Shokri Ghanem told the \textit{Washington Post} that, “[i]f stronger powers want us to end our atomic program, we have to do it. We have other priorities.”\textsuperscript{499}

The effective gathering and deployment of intelligence, as reflected in the October 2003 ship interdiction and November 2003 sharing of an intercepted conversation between Libya and A.Q. Khan, also significantly influenced Libya’s decision to comply. Catching Libya red-handed gave the United States leverage and convinced Libya it could not successfully hide even a part of its nuclear programs. Prior to these developments, Libya had continually downplayed the extent of its nuclear program and insisted, both publicly and in its secret negotiations with U.K. and U.S. officials, that the program’s purpose was peaceful.\textsuperscript{500} The


\textsuperscript{495} GORDON CORERA, \textit{SHOPPING FOR BOMBS} 174 (2006); Blair Lauds, supra note 477 (quoting Blair as stating: “Libya came to us in March... to see if it could resolve its weapons of mass destruction issue.”).

\textsuperscript{496} CORERA, supra note 495, at 174–76.


\textsuperscript{500} CORERA, supra note 495, at 182–86.
Libyan leadership apparently hoped to engineer a deal in which it would forsake a part of its nuclear program and retain the rest unbeknownst to its interlocutors. Only after the disclosure of the intercepted conversation did the Libyans finally admit to the full scope of their program, turning over a nuclear weapon design they had received from the A.Q. Khan network and paving the way for Libya's announcement that it would fully and verifiably comply with its nonproliferation obligations.

C. India

Although Indian Prime Minister Vajpayee ultimately chose to engage in nuclear weapons testing in utter disregard of sanctions, two of Vajpayee's predecessors were clearly deterred from testing by the prospect of sanctions. Less information is available about the Indian nuclear weapons program than about the Iraqi and Libyan programs, which were laid bare and dismantled by international weapons inspectors. George Perkovich makes a compelling case, however, that "international pressures and sanctions on technology imports following the 1974 test . . . limited India's interest in developing and deploying nuclear weapon capabilities." Perkovich explains that the nonproliferation regime "impeded the technological development of the Indian nuclear program, while the desire to avoid further international political and economic recriminations caused Indian leaders to choose a policy of self-restraint" between 1974 and 1998.

For example, Prime Minister Indira Gandhi rejected the Indian nuclear establishment's requests to follow up the "peaceful nuclear explosion" of 1974 with additional tests and the development of nuclear weapons. Gandhi's refusal was motivated in part by the political and economic pressures the international community placed on India in response to the 1974 test. In 1995, Indian Prime Minister Narasimha Rao strongly considered ordering additional nuclear tests, going so far as to authorize test preparations. U.S. intelligence experts noticed the preparations, however, and they were reported in the American media. The resulting international furor helped convince Rao that Indian tests would result in sanctions costly enough to outweigh the value of test-

501. Id.
502. Id. at 190.
503. PERKOVICH, supra note 5, at 452.
504. Id.
505. Id. at 224.
506. Id.
507. Id. at 365–71.
508. Id. at 368.
Reportedly, Rao asked his economic advisers how nuclear tests would affect the economy and was told that sanctions would increase inflation (which had contributed heavily to previous election losses). "This intensified Rao's doubts about conducting tests," and he did not proceed with them.\textsuperscript{310}

The Gandhi and Rao decisions reflect the potential for sanctions to deter proliferant activity even in the absence of any threat of force. In the Rao case, the deterrent effect was maximized by detection of the proliferant act in the planning stage. In contrast, the Vajpayee tests are a reminder that sanctions costs sufficient to deter two leaders of a particular country can be insufficient to deter a third who is motivated by nationalism or other ideologies that downplay economic costs.

VI. LESSONS LEARNED AND NEXT STEPS

This Article has analyzed six cases of interaction between nuclear proliferants and the international community. This Part will first derive three key lessons from these cases and then suggest how these lessons can be applied to restoring the nuclear nonproliferation regime's ability to prevent proliferation.

A. Lessons Learned

1. Nuclear Proliferation Detection Mechanisms Must Be Strengthened

First, the NPT's mechanisms for detecting violations are dangerously weak and must be strengthened. Under the current arrangements, an NPT member state weighing whether to develop nuclear weapons would inevitably calculate the likelihood of getting caught cheating as slim. Iran managed to conceal nuclear facilities, materials, and activities from the IAEA for eighteen years before an Iranian dissident group revealed them in 2002. Libya successfully hid its nuclear weapons program from the IAEA for over a decade. Iraq also kept a nuclear weapons program secret from the IAEA for more than a decade, coming within six months of a nuclear bomb before Iraq invaded Kuwait in 1990. Yet the IAEA still largely depends for verification on the weak tools contained in the INFCIRC/153 safeguards agreements. Enhanced verification and monitoring authorities, such as those contained in the Additional Protocol, would significantly improve the IAEA's capabilities.

\textsuperscript{309} Id. at 370.
\textsuperscript{310} Id. at 370–71.
to detect violations. Improved monitoring and verification are imperative if the nuclear nonproliferation regime is to regain its capability to prevent proliferation.

2. Strong Sanctions Can Stop or Slow a Nuclear Weapons Program

A second lesson is that strong sanctions can stop or slow the progress of a nuclear weapons program. The international community learned, in the wake of the U.S. occupation of Iraq, that the IAEA's special inspections regime for Iraq, coupled with stiff sanctions, destroyed Iraq's nuclear weapons program and kept it from restarting. The sanctions helped convince Saddam not to rebuild his nuclear weapons program, contained his ability to reconstitute it, and provided critical leverage to ensure Iraqi cooperation with UN inspections and monitoring. Sanctions also induced Libya's government, a regime formerly "synonymous with international terrorism,"\(^{511}\) to forsake terrorism and completely and verifiably relinquish its nuclear, chemical, and biological weapons programs. The sanctions on Libya both coerced Qaddafi, including by threatening his grip on Libya, and contained his ability to develop WMD. The impact on Qaddafi of the military actions against Saddam exemplify how actions undertaken against one country can deter another. Fear of sanctions also helped dissuade various Indian governments from engaging in additional nuclear tests between 1974 and 1998.

In order to be sufficiently strong to stop or slow the progress of a nuclear weapons program, sanctions should be widely and effectively implemented and specifically designed to match both the sanctions' goals and the characteristics of the target regime. The need for wide, and ideally universal, implementation is exemplified by the case of Libya, which increased its terrorist activities in response to unilateral U.S. sanctions in the early 1980s and decreased its terrorist activities following the imposition of UN sanctions in the early 1990s. As noted previously, globalization, the increasing integration of the international economy, "is a double-edged sword for economic sanctions," because interdependence increases a target's potential vulnerability to disruption of international trade and capital flows while also increasing the opportunities for it to evade sanctions.\(^{512}\) As a result, sanctions implemented by a small number of states become increasingly ineffective, while universally implemented sanctions become increasingly powerful.\(^{513}\)

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512. Elliott, supra note 161, at 3.
513. Id.
Averting Catastrophe

The many avoidable problems associated with the Iraq sanctions regime underscore the need for careful design and rigorous implementation of sanctions. Future sanctions regimes will benefit from the lessons learned from the investigations of the Iraq sanctions, the work of the various sanctions committees, and the sanctions reform research initiatives launched by the Swiss, German, and Swedish governments. Sanctions may need to differ depending on whether their purpose is to coerce, contain, deter, create a legal or political foundation for additional stronger sanctions, or some combination thereof. Sanctions may also need to be specially tailored in light of the ideology of their target. For regimes such as Iran's, with ideologies that downplay economic prosperity and exalt values such as martyrdom and suffering, sanctions may need to cause relatively greater pain before they have a coercive or deterrent effect. Indeed, with such regimes sanctions may be ineffective unless they either contain the regime or cause the regime to fear that noncompliance would endanger its grip on the population it rules.

3. The International Community’s Persistent Failure to Impose Strong Sanctions Encourages Proliferation

A third lesson is that the international community too often has been unwilling to impose strong (and in some cases any) sanctions on proliferators. The Article reviewed three cases—Iran, India/Pakistan, and North Korea—in which there is evidence that strong sanctions could have curbed proliferation. Since the Iranian leadership is motivated at least in part by nationalism and a religious conviction that exalts martyrdom and suffering, effective sanctions would likely have to cause the regime to fear losing its grip on power. There is evidence that Iran's economy is sufficiently vulnerable that strong sanctions could have such an impact and thus induce the regime to halt its nuclear weapons program. Yet the international community failed to sanction Iran for four years after discovery of Iran’s two decades of noncompliance with its NPT safeguards agreement. Iran used those four years to advance its nuclear program considerably. Iran’s more recent failure to comply with the requirements of the IAEA Board and the Security Council has thus far resulted in sanctions too weak to coerce or contain Iran or deter other potential proliferants. The weakness of the sanctions imposed on Iran stand in stark contrast with the billions of dollars of European, Russian, and Chinese trade with Iran that was unaffected by the sanctions and thus represents leverage lost.

Had tougher sanctions been imposed on India following its 1998 nuclear detonations, Pakistan may have refrained from testing. The weak
sanctions that were imposed by some of the international community on India and Pakistan following their 1998 tests were soon lifted. Indeed, the United States is now providing India with the benefits of NPT membership without India having to undertake the obligations. The small price India and Pakistan have paid for their nuclear proliferation has not gone unnoticed by other potential proliferators.

The North Korean regime depends for its survival on trade with China and South Korea, making it an ideal target for strong economic sanctions. But North Korea's withdrawal from the NPT and announcement that it possessed nuclear weapons were not even met with a condemnatory Security Council resolution, let alone sanctions, and the sanctions imposed following North Korea's nuclear weapons test were too weak to coerce or contain North Korea or deter other potential proliferants. In fact, the weak response to North Korea's nuclear program seems to have emboldened the Iranian leadership. As the New York Times editorialized on October 12, 2006, three days after North Korea detonated a nuclear weapon, "Welcome to the age of impunity."

A state currently weighing whether to develop nuclear weapons is bound to conclude that the likelihood of getting caught violating the nuclear nonproliferation regime—and of being seriously sanctioned if caught—are both low. As Elihu Root, the 1912 Nobel Peace Prize laureate, Secretary of State, and first President of the American Society of International Law, stated almost a century ago, "International laws violated with impunity must soon cease to exist."  

B. Next Steps

The disappearance of the nuclear nonproliferation regime is a frightening prospect. The diffusion of nuclear weapons technology since the 1960s means that President Kennedy's feared number of fifteen or twenty nuclear-weapons-possessing states could rapidly be attained and surpassed. Each additional state in possession of nuclear weapons increases the risk that such weapons will be used—in anger or by accident—at a cost of hundreds of thousands of deaths.

515. See Joseph Cirincione, Proliferation Threats and Solutions, 19 NOTRE DAME J.L. ETHICS & PUB POL'Y 339, 342-43 (2005) (discussing the potential collapse of the nuclear nonproliferation regime and noting that such a collapse could occur quite rapidly, as "there are two to three dozen countries that could build nuclear weapons quickly but have made the political decision not to do so.")
1. The Challenge of Amending the Nuclear Nonproliferation Regime

The nuclear nonproliferation regime needs to be enhanced before it is too late. Unfortunately, the NPT is nearly impossible to amend formally. With the exception of its 1995 extension, the treaty has not been formally amended since its entry into force. Of the seven NPT Review Conferences since the treaty’s entry into force, three—those in 1980, 1990, and 2005—were so contentious they ended without even an agreed concluding statement.\footnote{516} The near-impossibility of formally amending the NPT is due in part to this contentiousness, which has beset the treaty’s formal review mechanism. An even greater obstacle is NPT Article VIII.2, which requires that any amendment be approved by “the votes of all nuclear-weapon States Party to the Treaty and all other Parties which, on the date the amendment is circulated, are members of the Board of Governors of the International Atomic Energy Agency.”\footnote{517} In other words, every member of the IAEA Board of Governors has a veto over any NPT amendment. In 2007, there are thirty-five members of the IAEA Board of Governors, including several countries with questionable commitment to nonproliferation.\footnote{518}

The simplest and speediest way to make legally binding changes to the nuclear nonproliferation regime is through a UN Security Council resolution. Passage of a Security Council resolution requires only the support of nine of the fifteen Security Council members, including the concurring votes (affirmative vote or abstention) of the five permanent members of the Council.\footnote{519} “Amending” the nuclear nonproliferation regime through a UN Security Council resolution would be consistent with an important new Security Council practice: the adoption under Chapter VII of “global legislative resolutions” that impose universally binding obligations of general application for an indefinite period of time on all UN member states in response to threats of a global nature. This new practice is distinct from more traditional resolutions, which impose binding obligations that seek to address, and last for the duration of, a particular dispute or situation.\footnote{520}

\begin{footnotes}
\footnote{517}{NPT, supra note 3, art. VIII, para. 2.}
\footnote{518}{See IAEA, Board of Governors, http://www.iaea.org/About/Policy/Board/index.html. Members of the Board in 2006–07 include Cuba, India, Libya, Pakistan, and Syria. Id.}
\footnote{519}{U.N. Charter art. 27, para. 3.}
\end{footnotes}
The two preeminent examples of "global legislative resolutions" are Security Council resolutions 1373 and 1540. Resolution 1373, unanimously adopted on September 28, 2001, obligated all states to take various measures to combat terrorism, including preventing the financing of terrorist acts, freezing terrorist funds, refraining from providing "active or passive" support to terrorists, and denying safe haven to terrorists.\textsuperscript{521} Resolution 1373 filled a gap in international law left by stalled efforts to negotiate a comprehensive convention against international terrorism and the failure by many states to become party to the twelve existing international conventions and protocols related to terrorism.\textsuperscript{522} In drafting Resolution 1373, the Council drew provisions from those existing anti-terrorism conventions and made them binding on all states.\textsuperscript{523} Resolution 1540,\textsuperscript{524} unanimously adopted in April 2004,\textsuperscript{525} effectively filled several gaps in the NPT, including the NPT's failure to fully prohibit assisting terrorists to acquire nuclear weapons\textsuperscript{526} and failure to require physical protection of sensitive nuclear materials.\textsuperscript{527}

\begin{itemize}
\item \textsuperscript{522} Rosand, \textit{supra} note 520, at 546–51.
\item \textsuperscript{523} \textit{Id.} at 581.
\item \textsuperscript{525} Wade Boese, \textit{Security Council Unanimously Adopts Resolution on Denying Terrorists WMD}, \textit{Arms Control Today}, May 2004, at 34, 34.
\item \textsuperscript{526} The only prohibition in the NPT that seems to address acquisition of nuclear weapons by nonstate actors, such as terrorists, is the provision in Article I that each NWS "undertakes not to transfer to any recipient whatsoever nuclear weapons." See NPT, \textit{supra} note 3, art. I. Nonstate recipients appear not to be included in the broader obligation on each NWS, set forth in the very next phrase of Article I, "not in any way to assist, encourage, or induce any non-nuclear weapon State to manufacture or otherwise acquire nuclear weapons." \textit{Id.} In addition, the NPT contains no similar prohibition on NNWSs assisting, encouraging, or inducing the manufacture or other acquisition of nuclear weapons. See NPT, \textit{supra} note 3. Nonstate recipients are also excluded from the Article III.2 requirement on every NPT party, including NNWSs, not to provide, in the absence of safeguards, certain fissionable or related material "to any non-nuclear-weapon State." \textit{Id.} art. II, para. 2. Most of these gaps in the NPT were remedied by paragraph 1 of Resolution 1540, which "[d]ecides that all States shall refrain from providing any form of support to non-State actors that attempt to develop, acquire, manufacture, possess, transfer or use nuclear, chemical or biological weapons and their means of delivery." S.C. Res. 1540, \textit{supra} note 524, § 1. The NPT's failure to adequately address terrorist acquisition of nuclear weapons is a result of the fact that "[w]hen the NPT was concluded in 1968, the drafters did not contemplate the danger of nuclear terrorism." See William C. Potter, \textit{The NPT Review Conference: 188 States in Search of Consensus}, \textit{Int'l Spectator}, July–Sept. 2005, at 19, 24.
\item \textsuperscript{527} Article III safeguards, notwithstanding their name, do not require physical protection measures of the kind that might prevent a terrorist group from stealing weapons-usable nuclear material. See NPT, \textit{supra} note 3, art. III. Nor does any other NPT provision require such measures. This gap is addressed by paragraph 3 of Resolution 1540, which “[d]ecides” that “all States shall take and enforce effective measures to establish domestic controls to prevent the proliferation” of nuclear weapons and their means of delivery, and to that end shall
2. Enhancing the IAEA's Ability to Spot Violations

Designing a Security Council resolution that would greatly enhance the IAEA’s ability to spot violations of the NPT is relatively simple. Making all states subject to the strictures of INFCIRC/153 and the currently optional Additional Protocol would be a vast improvement over the current state of affairs. According to El Baradei, “our experience in Iraq before the Gulf War, and our recent experience in Iran and Libya, have . . . highlighted the importance to verification of the additional protocol . . . that provides the Agency with significant additional authority with regard to both information and physical access.”528 “Without the authority provided by the protocol,” says El Baradei, “our ability to draw conclusions is mostly limited to the non-diversion of material already declared, with little authority to verify the absence of undeclared nuclear material or activities.”529 As of January 2007, however, only seventy-eight of the 189 NPT member states had entered into Additional Protocol agreements.530 To avoid this problem, a new resolution could directly impose on all member states the IAEA authorities contained in the INFCIRC/153 and Additional Protocol agreements, and thus clearly enhance the IAEA's ability to spot NPT violations.531

3. Helping Ensure Violations are Effectively Sanctioned

How to help ensure that states caught violating the nuclear non-proliferation regime are effectively sanctioned is considerably more challenging. Any changes must address the two major motivations driving the opposition to strong sanctions of many states and other international players that are avowedly opposed to nuclear proliferation. The first motivation is the humanitarian concern that comprehensive sanctions will inevitably cause so much harm to innocent members of the population of the targeted country as to exceed the benefits of achieving the sanctions objective. The second motivation—which influences some of the same and many different critics—is a lack of

529. Id.
530. IAEA, Strengthened Safeguards System, supra note 82; United Nations, Status, supra note 7.
531. In order to maximize the perceived legitimacy of, and thus voluntary compliance with, the “amending” resolution, it should be adopted by consensus, as were both Resolution 1373 and Resolution 1540, and following consultation with a broad range of non-Council members. See Rosand, supra note 520, at 581.
willingness to sacrifice the sender's own short-term profits for whatever long-term benefits sanctions might bring. Both motivations lead their proponents to support either targeted sanctions or no sanctions whatsoever.

Targeted sanctions are clearly well suited to minimizing humanitarian impacts on the population of the target state and minimizing sanctions costs to the senders. Targeted sanctions, however, are less effective than comprehensive embargoes at achieving the primary purposes for which sanctions are imposed. To the extent that sanctions pain felt by a country's general populace can spur it to pressure a regime into compliance, targeted sanctions designed to minimize impact on the general populace are a missed opportunity. In addition, targeted sanctions are generally more complicated and thus more difficult to monitor and implement effectively. Finally, targeted sanctions, even when implemented to maximum effect, may simply not impose sufficient costs to coerce, contain, or deter decisionmakers.

a. Addressing Humanitarian Opposition to Sanctions

Humanitarian advocates of targeted sanctions rightly draw attention to the need to design and implement sanctions so as to achieve the objectives as quickly as possible at the lowest possible human cost to the populace at large. In doing so, however, the targeted sanctions movement often prioritizes minimizing costs to the populace over achieving the overall objective. This may make sense when the overall objective is, for example, reversing a coup d'état, as with the Security Council sanctions on Haiti and Sierra Leone. From a moral and practical perspective, the humanitarian cost of the sanctions to a country's populace may arguably not be worth the benefits of restoring democracy in that particular country.

However, if the overall objective is preventing nuclear proliferation, an achievement that may save literally millions of lives, the international community should, if necessary, be willing to exact a very heavy price. Humanitarian advocates of targeted sanctions will likely respond to this by pointing to the sanctions maintained against Iraq during the 1990s for counterproliferation reasons, arguing that those sanctions accomplished little and bear the blame for the suffering of innocent Iraqis. However, as this Article demonstrates, while this argument may have carried weight prior to 2003, it no longer does. Historical data that have come to light during the occupation of Iraq make clear that sanctions did succeed in depriving Saddam of nuclear weapons, and the vast majority of the suffering attributed to the sanctions was due to the Iraqi government's manipulations and not the sanctions themselves. Moreover, future sanc-
tions designed to replicate the Iraq sanctions' success in halting Sad-dam's nuclear weapons program can minimize both harm to innocent civilians and the potential for manipulative behavior of the target country's leadership by implementing the lessons contained in the IIC and GAO reports.

This Article hopefully will help allay humanitarian concerns about strong counterproliferation sanctions. In addition to correcting outdated perceptions of the Iraq sanctions, this Article has demonstrated that 1) far from causing pointless pain, sanctions stopped or slowed the Libyan and Indian nuclear weapons programs; 2) strong sanctions could have stopped or slowed the Pakistani, North Korean, and Iranian nuclear programs; 3) targeted sanctions are less effective than comprehensive sanctions; and 4) recent advances, such as the sanctions committee and sanctions reform initiatives, can enable strong sanctions to achieve their objectives more quickly and at lower costs to the general population of the target country.

b. Addressing Unwillingness to Sacrifice Short-Term Profits for Long-Term Benefits of Sanctions

The most difficult challenge facing the nuclear nonproliferation regime, and one of the most difficult challenges facing the entire collective security system underpinning the UN Charter, is the lack of willingness on the part of many states—in particular Russia and China—to sacrifice their short-term profits for the long-term benefits sanctions bring. As this Article has demonstrated, proposals to impose strong counterproliferation sanctions on North Korea, Iran, India, and Pakistan foundered for this very reason.

China has refused to seriously sanction North Korea in considerable part because it fears the economic cost of a flood of refugees should the North Korean regime collapse.\textsuperscript{532} China has opposed strong sanctions on Iran in large part because it does not want to have to pay higher oil and gas prices elsewhere.\textsuperscript{533} Russia has opposed strong sanctions on Iran in large part because it wants to continue profiting from sales to Iran of hundreds of millions of dollars in weapons, nuclear reactors, and other

\begin{footnotes}
\item[532] See supra Section IV.B; see also, e.g., Anthony Faiola & Maureen Fan, \textit{North Korea's Political, Economic Gamble}, Wash. Post, Oct. 10, 2006, at A12 ("China and South Korea have poured billions of dollars in aid and investment into the North, effectively propping up Kim's government under the assumption that any collapse there would send millions of desperate refugees pouring across the country's borders. The risk of such an economic calamity, they have gambled, has outweighed the risk of a nuclear-armed North Korea.").
\item[533] See supra Section IV.C; see also Mellor & Lim, supra note 278; King & Champion, supra note 257.
\end{footnotes}
Russia also opposed sanctions on India largely because it wished to move forward with a $2.6 billion nuclear reactor sale to India\textsuperscript{535} and with plans to sell roughly fifteen billion dollars in arms to India over the ensuing decade.\textsuperscript{536} U.S. sanctions on India and Pakistan took a back seat to the pecuniary interests of American farmers, with Congress less than two months after the detonations rushing a sanctions-lifting bill to the floor so that American wheat farmers could bid on a $37 million sale to Pakistan.\textsuperscript{537}

To the extent sanctions help prevent nuclear proliferation—and experience with Iraq, Libya, and 1974–98 India shows that they do—sanctions help prevent future costs. Sanctions serve as investments in averting the costs of nuclear 9/11s—more than half a million lives and over one trillion dollars in damage per bomb detonated in a major city—as well as averting the costs of arms races that ensue as a proliferant’s neighbors feel compelled to develop their own nuclear arsenals and enhance their conventional militaries and homeland security defenses. Sanctions also help prevent the costs to the sender state, target state, and broader international community of military intervention designed to prevent nuclear proliferation before it occurs.

Unfortunately, key members of the international community, including such potential sanctions-imposing bodies as the Security Council and EU, have been failing to appropriately balance present lost profits against the future costs of arms races, catastrophic nuclear attacks, and military intervention. In practice, when future dangers of a somewhat uncertain magnitude and timing compete against the present costs of sanctions, the present certain costs too often hold sway. The voice of businesspersons who stand to lose contracts now tends to outweigh the interests of unknown, perhaps even as yet unborn, persons who will lose their lives and livelihoods to nuclear proliferation later. This is particularly true in situations where sender states with the most to lose in short-term profits are not the states that would reap the greatest long-term benefits from sanctions imposition. For example, while strong sanctions against Iran would cost Russia and China much more than they would the United States, the United States is considered to be at far greater risk from an Iranian nuclear arsenal. Thus, sanctions that would benefit the entire international community in the long term might not be imposed

\textsuperscript{534} See supra Section IV.C; King & Champion, supra note 257.
\textsuperscript{535} See supra Section IV.D; Diamond, supra note 364.
\textsuperscript{536} See supra Section IV.D.
\textsuperscript{537} See supra Section IV.D; Eric Schmitt, Senators Back Sale of Wheat to Pakistanis, N.Y. TIMES, July 10, 1998, at A1 (noting that food exports were exempted from the sanctions).
because of the particular countries which would have to bear their short-term costs.

This tendency to sacrifice long-term benefits in favor of short-term profits undermines the efficacy of the collective security system on which the UN Charter is based. Under the collective security system, states renounce the temptation to take unilateral, preventive forceful action against a potential aggressor in return for a guarantee that the collective will come to their rescue if they are attacked. This bargain is particularly tenuous with respect to nuclear weapons, where an attack could cause enormous and indeed irreparable damage before any rescue could occur. The rescue must therefore come before the attack, in the form of sanctions sufficient to coerce or contain the potential proliferant. If such sanctions are not forthcoming, the proliferant’s foremost potential victims will be very tempted to take preventive forceful action. Thus, the Russian and Chinese veto of serious sanctions against Iran may force the United States and Israel into a choice between a preventive strike or facing the risk of an Iranian nuclear arsenal.

If there is a simple solution to the “short-term profits” challenge to counterproliferation sanctions, this author has yet to discover it. The hope here is that by identifying the problem and providing some preliminary thoughts as to directions in which solutions might be sought, others might be inspired to contribute to addressing the challenge. The following paragraphs suggest three directions in which solutions might be pursued: pre-set sanctions, a system for cost-shifting, and case-by-case interaction between the permanent five members of the Security Council (the P-5).

i. Pre-set Sanctions

In domestic criminal law, the balancing of present costs against future dangers occurs differently than with Security Council resolutions. Legislatures set penalties for criminal violations on a generally applicable basis ahead of time, not on a case-by-case basis after the fact. Judges may be authorized by the legislature to impose sentences on individual offenders from within a range of potential penalties, but they are rarely given complete discretion. The legislature sets the parameters of the appropriate punishment for a criminal offense at a time when the identity

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538. Thus Articles 2(4) and 51 of the UN Charter provide that member states must wait to exercise their right of self-defense until “an armed attack occurs against” them and may exercise that right only “until the Security Council has taken measures necessary to maintain international peace and security.” See Thomas M. Franck, Collective Security and UN Reform: Between the Necessary and the Possible, 6 Chi. J. Int’l L. 597, 601 (2006).

539. Id. at 602.
of future offenders, and therefore all the costs of punishment, are still in the future and thus more likely to be efficiently balanced. Similarly, pre-set sanctions for proliferation might better reflect the balance between the value of preventing a nuclear attack and the costs to both the senders and the target of imposing counterproliferation sanctions. Pre-set sanctions might also reduce the prospect of proliferants attempting to use threats of violence to deter Security Council members from voting for sanctions. In addition, pre-set sanctions might contribute to deterring future proliferation. For example, by identifying in advance types of sanctions that would affect specific groups within target states, those groups would be spurred into lobbying against proliferation even before sanctions were imposed.\footnote{540}

The most effective way to pre-set such sanctions would be through an amendment to the UN Charter, an unlikely prospect. Alternatively, the Security Council could pass a resolution expressing its intent to impose particular sanctions for specified future proliferation activity. Although the initial resolution could not legally constrain the contents of subsequent resolutions, it would set an important political baseline. As another alternative, the P-5 could reach an agreement between themselves to support specified sanctions on proliferators in particular future circumstances.\footnote{541} It is far from clear, however, that such an advance commitment would in fact lead to the imposition of stronger sanctions. The League of Nations Charter provided that “should any Member of the League resort to war . . . all other Members of the League” would immediately subject the warring member to comprehensive economic sanctions,\footnote{542} but League members nevertheless failed to impose sanctions in response to blatant aggression.\footnote{543} Pre-set sanctions might ultimately prove to be a part of the solution, but further work will be needed to identify an appropriate mechanism for promulgating such pre-set sanctions and applying them to actual nuclear nonproliferation violations.

\footnotetext{540}{On the other hand, it could be more difficult under a preset system than under the current one to adjust sanctions in specific cases to minimize humanitarian costs or take into account any mitigating circumstances that might make the proliferation (or step towards it) seem less blameworthy.}

\footnotetext{541}{Professor Thomas Franck has suggested that the P-5 negotiate a sidebar agreement between themselves that would enumerate a few crucial situations in which the veto would not be used to block initiatives supported by a voting majority of the Council. Franck, \textit{supra} \textit{note} 538, at 609. A similar instrument could be used to record P-5 agreement on pre-setting proliferation sanctions.}

\footnotetext{542}{Covenant of the League of Nations art. 16.}

\footnotetext{543}{\textit{See}, \textit{e.g.}, F.S. Northedge, \textit{The League of Nations} 161–64, 243–45 (1986) (describing the League's failure to sanction Japan's annexation of Manchuria and its failure to sanction Italy's conquest of Ethiopia).}
ii. Systematic Cost-Shifting

Article 50 of the UN Charter provides that if preventive or enforcement measures against any state are taken by the Security Council, any other state “which finds itself confronted with special economic problems arising from the carrying out of those measures shall have the right to consult the Security Council with regard to a solution of those problems.” No funding assistance is guaranteed, but requests for consultation with the Security Council pursuant to Article 50 have been made in at least three cases: the sanctions on Rhodesia, Yugoslavia, and Iraq. The requesting states have predominantly been developing countries that neighbor the target states. Developing countries, with their poorer and often relatively fragile economies, are considered less able to bear sanctions costs.

In connection with the Iraq sanctions, a total of twenty-one governments appealed for assistance pursuant to Article 50, claiming a total estimated loss of thirty billion dollars. Although the UN took some steps that alleviated the burden on Jordan, which suffered the most from the Iraq sanctions, the principal mechanism for aiding states adversely affected by Iraq sanctions was a non-UN body, the Gulf Crisis Financial Coordination Group, which provided eleven countries, including Jordan, with a total of about nine billion dollars in grants or concessional loans. Jordan did not feel it was adequately compensated, and a number of other adversely affected countries received nothing.

The P-5 would likely avoid characterizing any sanctions-impact assistance they might provide each other as falling under Article 50, so as to avoid strengthening other states’ claims for redress under Article 50, claims which the United States in particular has tended to oppose. Still, the P-5 might draw on some of the methodologies developed, in connection with Article 50 claims, for fairly and accurately determining the

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546. Id. at 183–84.
547. Id. at 187.
548. Id. at 188–89.
550. Doxey, supra note 544, at 189.
551. See id. at 192.
impact of sanctions on non-target states and identifying means of efficiently redressing such losses.\textsuperscript{552} Using such methodologies, the P-5 could develop amongst themselves a system or practice of compensating whichever states among them might, with respect to a particular set of nuclear proliferation sanctions, bear the brunt of short-term costs but receive relatively few long-term benefits.\textsuperscript{553} Such an arrangement, were it to become public, would no doubt be criticized as elitist and exclusionary for limiting compensation to P-5 states. Yet it would be far preferable to the current state of affairs, wherein certain P-5 states are prone to vetoing sanctions of global benefit based on short-term costs.

\begin{itemize}
\item[iii.] \textbf{Case-by-Case Use of Economic Carrots and Sticks}
\end{itemize}

Finally, and most simply, P-5 members and other individual states that expect to reap disproportionately the long-term benefits of a particular set of sanctions might consider offering economic benefits (such as grants, loans at concessional rates, debt relief, and trade concessions) to those P-5 members that might otherwise be inclined for short-term economic reasons to veto such sanctions. U.S. diplomats already engage in such horse-trading to some degree, but are limited in doing so by Congress' control over the federal budget, tariff rates and the like. In the United States, consideration should be given to congressional "fast track" or other arrangements that would facilitate the ability of the United States to offer economic incentives in exchange for P-5 sanctions votes that would redound to the long-term benefit of the United States.

In addition, P-5 members inclined for short-term economic reasons to veto sanctions of broader long-term benefit could be threatened with the withdrawal of existing discretionary economic benefits. The threat could come from the government of the particular state that expects to benefit from the sanctions or from its people (the latter would avoid any potential problems with WTO rules). Stanford University economists recently found that the informal American consumer boycott of French wine in the wake of French opposition to the Iraq war resulted at its peak in a twenty-six percent slump in sales, costing France over $100 million.\textsuperscript{554} In 2005, the United States imported $243 billion in Chinese merchandise (including a heavy proportion of consumer items including

\textsuperscript{552} See id. at 186, 197.

\textsuperscript{553} In developing such a system or practice, care would have to be taken to avoid creating a moral hazard whereby a P-5 member such as Russia might be emboldened to strike even broader deals with rogue states knowing it would be bailed out in case sanctions are imposed.

toys, games, and apparel) and $15 billion from Russia (including a con-
siderable proportion of consumer items including precious stones and
vodka). If American consumers decide that Russian and Chinese un-
willingness to seriously sanction North Korea and Iran is contribut-
ing to the likelihood of a future nuclear attack on a U.S. city, the reduced sales
of Russian and Chinese-made goods may come to outweigh the value of
those countries' economic stakes in North Korea and Iran.

VIII. CONCLUSION

The nuclear nonproliferation regime worked well for its first 25
years, converting the spread of nuclear weapons from an act of national
pride into an act of international outlawry. Today, however, the nuclear
nonproliferation regime is on the verge of collapse.

Drawing from six case studies and historical data that has recently
become available, this Article derives three key lessons applicable to re-
storing the nuclear nonproliferation regime's capacity to prevent
proliferation. The Article illustrates how the regime's weak verification
authorities have caused it persistent difficulty in catching violators, and it
suggests how to strengthen these authorities. The Article also demon-
strates how strong sanctions have in the past succeeded in stopping or
slowing the progress of illicit nuclear weapons programs. In addition, the
Article describes the international community's recent failures to seri-
ously sanction states caught violating the nuclear nonproliferation
regime.

The regime as it exists now has little remaining capacity to coerce,
contain, or deter violations. An NPT member state currently considering
whether to develop nuclear weapons can only conclude that the IAEA's
verification and monitoring authorities are too weak to promptly and
reliably catch it cheating and, even if it is caught, it will receive light
sanctions at worst. If the nuclear nonproliferation regime is not soon en-
hanced, it is likely to collapse, with grave consequences for international
peace and security.

In light of the exceptional difficulty of amending the NPT, this Arti-
acle proposes that enhancements to the IAEA's verification and
monitoring authorities be made through a UN Security Council resolu-
tion, and it identifies precedents for such an approach. The Article also
addresses the two major motivations driving the opposition to strong sanc-
tions of many states that are avowedly opposed to nuclear proliferation.

555. National Trade Data, TradeStats Express, http://tse.export.gov/ (TradeStats Express
website of the International Trade Administration, U.S. Department of Commerce).
It argues that "humanitarian" opposition to strong sanctions on nuclear proliferators may be based on outdated information and contributes to updating the historical record. The Article also draws attention to and analyzes the blocking by Moscow and Beijing of Security Council adoption of sanctions against proliferators because of the short-term cost to Russia and China of such sanctions, even though the sanctions costs may be a good long-term investment for the international community as a whole. The Article suggests several directions in which a solution to this problem might be found, including pre-set sanctions, a P-5 cost-shifting agreement, and case-by-case negotiations within the P-5.

The nuclear nonproliferation regime is at a tipping point, with its viability in the balance. If a nuclear 9/11, or a series of them, someday occurs, it will be because the international community failed to enforce and repair the nuclear nonproliferation regime while it still could. The time to act is now. Humanity's future may depend on it.