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Assessing India's nuclear weapons posture: the end of ambiguity?

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INDIA'S NUCLEAR WEAPONS POSTURE: THE END OF AMBIGUITY?

by

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This thesis examines the future of India's nuclear weapons posture. Since testing a nuclear device in 1974, India been able to produce weapons material within its civilian nuclear power program. Despite having this nuclear weapons capability, India prefers to maintain an ambiguous nuclear posture. New pressures in the post-cold war era -- the loss of the Soviet Union as a strategic ally, the indefinite extension of the nuclear nonproliferation treaty, the rise of Hindu nationalism, and India's growing participation in the global economy -- have the potential to derail India's current nuclear policy. This thesis identifies the domestic and international pressures on India, and assesses the prospects for India to retain its ambiguous policy, renounce the nuclear option, or assemble an overt nuclear arsenal.

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ASSESSING INDIA'S NUCLEAR WEAPONS POSTURE: THE END OF AMBIGUITY?

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ABSTRACT

This thesis examines the future of India's nuclear weapons posture. Since testing a nuclear device in 1974, India has been able to produce weapons material within its civilian nuclear power program. Despite having this nuclear weapons capability, India prefers to maintain an ambiguous nuclear posture. New pressures in the post-cold war era -- the loss of the Soviet Union as a strategic ally, the indefinite extension of the nuclear nonproliferation treaty, the rise of Hindu nationalism, and India's growing participation in the global economy -- have the potential to derail India's current nuclear policy. This thesis identifies the domestic and international pressures on India, and assesses the prospects for India to retain its ambiguous policy, renounce the nuclear option, or assemble an overt nuclear arsenal.

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EXECUTIVE SUMMARY

For over twenty years India has maintained an ambiguous nuclear weapons posture. In 1974 India demonstrated its nuclear weapons capability by detonating a nuclear device, and it has the ability to produce weapon-grade fissile material within its civilian nuclear program. This thesis identifies post-cold war pressures on India and assesses the prospects for India to retain its ambiguous policy, renounce the nuclear option, or assemble an overt nuclear arsenal.

The post-cold war period has witnessed new security, political, and economic pressures on India's nuclear policy. The loss of the Soviet Union as a strategic ally, the indefinite extension of the nuclear nonproliferation treaty, the rise of Hindu nationalism, and India's growing participation in the global economy have the potential to derail India's current nuclear policy of ambiguity. I concludes that unless one or more the pressures significantly changes, India is likely to maintain an ambiguous nuclear weapons posture. This thesis provides the following contingent generalizations concerning the future of India's nuclear weapons posture:

Nuclear Denunciation:

1. India's civilian nuclear power program contributes to a national energy crisis which significantly undermines foreign investment and economic growth.

Currently Indian elites perceive that nuclear technology as the solution rather than the source of India's energy deficit.[1] This dichotomy between elite perception and reality is attributed to the Indian nuclear bureaucracy long-standing propaganda campaign esposing the benefits of nuclear energy. ***If Indian elites realize that India's energy shortage is caused by an inefficient nuclear power program, denunciation of the nuclear weapons option will become more likely.***

2. Pakistan is India's main future adversary. Like India, Pakistan displays an ambiguous nuclear posture but, unlike India, has publicly stated that it is willing to consider regional arms control. Indo-Pakistani nuclear parity is not in India's security interests.[2] ***If India perceives that Indo-Pakistani nuclear parity is in Pakistan's best interest, India will strive for a bilateral nuclear agreement denouncing nuclear weapons.***

3. The international nuclear nonproliferation regime, embodied by the NPT and CTBT, are rejected by most Indians as discriminatory. The NPT and CTBT fail to address the global nuclear danger. ***If the world embraces time-***

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[1] Eighty-seven percent of Indian elites believe that India's nuclear power program will help solve the energy crisis. India's nuclear power plants, however, provide only three percent of all power generated but deplete the majority of the energy department's research and development budget.

[2] Pakistan's nuclear capability prevents India from effectively utilizing its conventional advantage and obtaining regional hegemony.

bounded global nuclear disarmament negotiations, the possibility of Indian inclusion in the NPT and nuclear weapons denunciation will become more likely.

Overt Nuclear Weapons Posture:

1. In April, 1996 national elections, the Hindu nationalist Bharatiya Janata Party (BJP) gained the largest percentage, although not a majority, of parliamentary seats. The right wing BJP has long advocated an overt Indian nuclear posture. Its election manifesto called for the rapid development of nuclear weapons as well as missiles to deliver them. The BJP promotes hastening the serial production and early deployment of the medium range Prithvi and the long range Agni missiles. ***If the BJP comes to power, with a clear majority, an overt nuclear weapons posture becomes more likely.***

2. The absence of Soviet influence in South Asia has two security consequences for India. First, India has lost the reassurance of a reliable and strong nuclear partner. During the cold war, an overt Indian nuclear posture was unnecessary due to the implied security guarantees of the Soviet Union. Second, the elimination of Soviet power leaves India in a disadvantageous position vis-à-vis China and Pakistan. The presumed Chinese transfer of nuclear and missile technology to Pakistan exacerbates India's fear of its northern neighbor and may compel India to advance its nuclear weapons

efforts. The de-militarization of the Sino-Indian border, however, signals improving relations between Beijing and New Delhi. Additionally, India and China are improving their economic relations. The maintenance of the Sino-Indian border agreement is essential to lasting peace between India and China. ***If there is a re-militarization of the Sino-Indian border, relations could breakdown and an overt Indian nuclear weapons posture becomes much more likely.***

3. India's growing participation in the global economy makes it vulnerable to international economic and diplomatic pressures. Most Indians perceive internal problems of poverty and ethnic violence as the big threats to national security. Fiscal restraints make an overt nuclear weapons posture too expensive. An rapidly growing Indian economy, however, would enable Indian policy makers to invest more resources in defense. ***If India's economy improves rapidly, with several years of sustained economic growth, an overt nuclear weapons posture becomes more likely.***

The end of the cold war provided a fresh start for U.S.-Indian relations. The ideological differences of the past have narrowed and many Indians hope that the United States and India can forge stronger relations based on mutual respect. Improving ties with the United States helps to restrain India's nuclear

program by making it more difficult for India to ignore Western calls for arms restraint.

This thesis concludes that India will maintain an ambiguous nuclear weapons posture for the foreseeable future. A dramatic change in one or more of the described pressures, however, could alter the future of India's nuclear policy. This thesis suggests that nonproliferation advocates focus their attention on arms control and confidence-building measures between India and Pakistan instead of emphasizing international nonproliferation agreements which India soundly rejects.

I. INDIA'S NUCLEAR POSTURE FACES EMERGING PRESSURES

A major concern of U.S. foreign policy is the proliferation of weapons of mass destruction. In the absence of cold war foreign policy objectives, the hindrance of nuclear weapons proliferation is a policy on which most Americans agree. One of the most important achievements of the Clinton administration was the April 1995 indefinite extension of the nuclear nonproliferation treaty (NPT). A notable non-member of the NPT, however, is India. Despite international pressure to become a non-nuclear state, India continues to maintain an ambiguous nuclear weapons posture.

A. INDIA'S AMBIGUOUS NUCLEAR WEAPONS POLICY

India has maintained an ambiguous nuclear weapons posture for over two decades. In 1974 India demonstrated its nuclear weapons capability by detonating a nuclear device, and it has the ability to produce weapon-grade fissile material within its civilian nuclear program. Observers estimate that India can quickly assemble several nuclear weapons.[1] Despite this presumed nuclear weapons capability, however, India has refrained from openly deploying nuclear weapons or even declaring the possession of nuclear weapons.

Emerging security, political, international, and economic pressures are making it difficult for India to hold on to its ambiguous nuclear weapons posture.

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[1] U.S. Department of Defense, Proliferation: Threat and Response (Washington, D.C.: Government Printing Office, 1996), 37.

This thesis identifies those pressures and assesses the future of India's nuclear weapons policy. One observer has suggested that the emerging pressures will force India to "move from the current policy of a general engagement in all directions to making hard strategic choices."[2] Will these pressures force India to abandon nuclear weapons? Or will they push India to develop an overt nuclear weapons posture? Can an ambiguous nuclear weapon posture endure?

1. Global and Regional Implications

India's ambiguous nuclear weapons posture has both regional and global implications. South Asian regional use of nuclear weapons concerns policy makers. U.S. Central Intelligence Agency Director James Woolsey testified in 1993 that South Asia is "the most probable prospect for future use of weapons of mass destruction, including nuclear weapons."[3] While India has never used, or threatened to use, nuclear weapons against its neighbors, the presence of nuclear weapons in South Asia, whether clandestine or overt, is troubling.

India and Pakistan fought three wars prior to either nation obtaining nuclear weapons technology.[4] In the past decade India and Pakistan experienced two major crisis. Although war was avoided, both had the potential for nuclear use.[5]

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[2] C. Raja Mohan, "Asia: The Return of Realpolitik," Hindu 2 February 1996.

[3] Brahma Chellaney, "India," in Mitchell Reiss and Robert S. Litwak, eds., Nuclear Proliferation after the Cold War (Baltimore: Johns Hopkins University Press, 1994),185.

[4] India and Pakistan fought wars in 1947, 1965, and 1971.

[5] In 1987 the militaries of both nations mobilized when the Indian army conducted Brasstacks, a large-scale exercise near the Indo-Pakistani border. In 1990 a crisis

The United States maintains a policy to cap, reduce, and eventually eliminate South Asian nuclear capabilities. While the nuclear capabilities of India do not directly threaten the United States, a South Asian nuclear arms race is seen as destabilizing. According to U.S. Under Secretary of Defense Joseph Nye, the Department of Defense (DOD) views South Asian nonproliferation as a high priority:

> DOD views the nuclear capabilities-and the associated ballistic missile programs-of India and Pakistan with considerable concern. The immediate physical demands on DOD resulting from a nuclear exchange between India and Pakistan would be primarily environmental and humanitarian as we would anticipate requests for disaster relief to include assistance with decontamination. DOD, however, must also take into account how the first use of nuclear weapons since World War II might affect the calculations of states in other regions- states that might use nuclear weapons against U.S. interests. As the department of the U.S. Government charged with physically defending those interests, it goes without saying the DOD places the highest priority on achieving our nonproliferation policy objectives in South Asia. "To cap, reduce and ultimately eliminate weapons of mass destruction" is not just a catchy phrase or an abstract concept. For DOD, it has a very "real world" significance.[6]

In addition to the above concerns, India's recent refusal to sign the Comprehensive Test Ban Treaty (CTBT) demonstrated India's ability to disrupt global arms control agreements. Because India insists that arms control treaties address global nuclear disarmament, India's nuclear weapons posture cannot be

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developed over suspected Pakistani assistance to separatist rebels in Kashmir. Investigative reporter Seymour Hersh contends that Pakistan loaded nuclear bombs aboard F-16's, and that a potential nuclear exchange was avoided by U.S. diplomatic efforts. See Seymour M. Hersh, "On the Nuclear Edge," The New Yorker, 29 March 1993.

[6] Joseph S. Nye, Jr., testimony before The Senate Foreign Relations Committee, Subcommittee on Near East and South Asia, 9 March 1995, 4.

viewed as merely a regional problem. India's ambiguous nuclear posture affects both regional and global nonproliferation efforts.

2. Predicting the Future

This thesis considers three possible Indian nuclear weapons policy options: 1) nuclear abstinence, 2) the development of an overt nuclear weapons capability, and 3) maintaining nuclear ambiguity. This first chapter defines these options, and sets out four pressures that will affect India's choice of one option over the others. Subsequent chapters analyze the affect of the emerging post-cold war pressures on India's nuclear decision. I assess how changes in the identified pressures on India's policy are likely to affect the future nuclear path that India may take.

3. Kroc Institute Public Opinion Survey

This thesis utilizes a public opinion survey conducted on one thousand Indian elites to illuminate current domestic perceptions of India's nuclear weapons posture. The survey, directed by the Joan B. Kroc Institute for International Peace Studies, was published in India and the Bomb: Public Opinion and Nuclear Options.[7] India's nuclear posture is clouded in secrecy and not directly affected by the elite opinion. The Kroc survey, however, does

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[7] David Cortright and Amitabh Mattoo, "Indian Public Opinion and Nuclear Weapons Policy," in David Cortright and Amitabh Mattoo, eds., India and the Bomb: Public Opinion and Nuclear Options (Notre Dame: University of Notre Dame Press, 1996), 8-14. The survey questioned one thousand Indian elites drawn from a diverse group of professionals, including government civil service, academics, politics, business, armed forces, and police. While the respondents accurately represented a cross section of Indian elites, the authors of the survey were unable to ascertain opinion from Indian decisionmakers and strategic planners. The authors acknowledge that secrecy surrounding India's nuclear weapons posture limits the scope of understanding India's strategic culture.

provide an examination of elite nuclear weapons perceptions. These perceptions can be attributed, in part, to the Indian governments propaganda campaign admonishing the benefits of nuclear technology. An opportunity for nonproliferation advocates arise, when there is a dichotomy between elite perceptions and reality. Specifically, nonproliferation advocates can point out inconsistencies in India's nuclear weapons posture which undermine its national interest.

B. INDIA'S THREE NUCLEAR WEAPONS POLICY OPTIONS

1. Nuclear Abstinence

India's first policy option is nuclear abstinence. Nuclear abstinence, or renunciation, can be conditional, unconditional, bilateral (in conjunction with Pakistan),or unilateral.[8] This option would most likely, but not necessarily, follow an Indian decision to accede to or sign an international agreement, such as the NPT, Comprehensive Test Ban Treaty (CTBT), Fissile Material Control Regime (FMCR) or the Missile Technology Control Regime (MTCR).

There is today, little support in India for nuclear abstinence. The Kroc survey found that just eight percent of elite respondents supported the

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[8] Kanti Bajpai, "Abstaining: the Nonnuclear Option" in David Cortright and Amitabh Mattoo, eds., India and the Bomb: Public Opinion and Nuclear Options (Notre Dame: University of Notre Dame Press, 1996), 2.

renunciation of the nuclear option.[9] The reasons these respondents gave for their position are identified in table 1.1.[10]

Indian Elites Reasons for Renunciation of Nuclear Weapons

Nuclear weapons are morally repugnant	46%
Nuclear weapons production harms the environment	41%
India cannot afford nuclear weapons	34%
Nuclear weapons do not address the primary threats to India's security	29%
A nuclear India would become the target of the major nuclear powers	18%

Table 1-1

[9] Cortright and Mattoo, "Indian Public Opinion," 9.

[10] Ibid.

The Kroc survey also found that the eight percent of elite Indian nuclear opponents is divided over what set of circumstances would warrant an Indian nuclear posture. Table 1-2 illustrates those circumstances. [11]

Future Conditions Which Might Justify the Possession of Nuclear Weapons

No Future Condition	60%
Threats From Other Nuclear Powers	22%
A Nuclear Test By Pakistan	10%

Table 1-2

Indian nuclear disarmament groups have little political impact on decision makers. First, opposition within India to its nuclear weapons program is formally led by a group with small numbers, the New Delhi based Committee for a Sane Nuclear Policy.[12] Second, Indian opposition groups to nuclear weapons are typically morally-rather than politically-based.

The nuclear denunciation movement in India is led by Gandhians who believe that weapons of mass destruction are "morally repugnant," and that nuclear weapons "could never fit within the Mahatma's strict philosophy of absolute nonviolence."[13] Whatever impact Indian opposition groups might have

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[11] Ibid.,11-12.

[12] Ibid., 4.

[13] Bajpai, "Abstaining: the Nonnuclear Option," 2.

is further diminished because there is little utility for international arms control advocates to exploit the groups, as those groups reject the NPT (as do others) as discriminatory.

2. Overt Nuclear Weapons Capability

The second policy option is the development of an overt nuclear weapons capability; there is significant support among Indian elites for this option. Thirty-three percent of Indian elites support an overt nuclear posture.[14] Varun Sahni defines a state as "going nuclear" when "it has developed and deployed nuclear weapons. Development, deployment, and declaration are the three essential elements of the policy option termed going nuclear."[15]

Supporters of "going nuclear" cite several reasons for the necessity of Indian nuclear weapons. Table 1-3 sets out those reasons.[16]

Reasons Why India Should Possess Nuclear Weapons

Nuclear threats from Pakistan	54%
Nuclear weapons improve India's international bargaining power	49%
Nuclear threats from China	20%

Table 1-3

[14] Cortright and Mattoo, "Indian Public Opinion," 9.

[15] Ibid., 1.

[16] Ibid., 11-12.

The proceeding table illustrates the perceived lack of concern about China as a threat among those favoring an overt nuclear weapons capability. This lack of concern has given regional arms control advocates new hope for a bilateral Indo-Pakistani non-nuclear agreement. In the past, India has insisted that any regional or international agreement must include the Chinese.

3. Status Quo (Nuclear Ambiguity)

Maintaining an undeclared and undeployed indigenous nuclear weapons capability, without agreeing to any international restraints, satisfies the majority of Indian elites. The Kroc survey found that fifty-eight percent of Indian elites support India's current policy of nuclear ambiguity.[17]

Supporters of the Indian government's official nuclear policy argue that their are benefits of an ambiguous nuclear posture. An ambiguous nuclear policy provides a sufficient nuclear deterrent yet avoids the costs of an arms race. Additionally, an overt nuclear posture may be perceived as provocative while an ambiguous posture maintains the moral high ground of non-aggression. India is able to maintain this two-sided policy of nuclear ambiguity with little international cynicism because of its Gandhian roots of nonviolence, a robust democracy, and strong civilian control, which dampen fears of Indian nuclear capability.

Aabha Dixit of the Institute for Defense Studies and Analyses concludes that India's ambiguous nuclear posture "reflects a prudent mix of idealism and pragmatism."[18] Nuclear ambiguity allows India to maintain its call for global

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[17] Ibid., 9.

[18] Ibid., 3.

nuclear disarmament while providing a minimum nuclear deterrent for itself and keeping a future nuclear weapons options open.

C. PRESSURES ON INDIA'S NUCLEAR WEAPONS POSTURE

1. Regional Security Pressures

This thesis identifies four post-cold war pressures on India's nuclear policy. The first pressure on India to alter its nuclear weapons posture concerns changes in the regional balance of power. P.R. Chari argues that South Asian ambiguous deterrence is precarious due to the end of the cold war and India's subsequent loss of the Soviet Union as an ally.[19] The absence of Soviet influence in South Asia has two clear security consequences for India. First, India has lost the reassurance of a reliable and strong nuclear partner. During the cold war an overt Indian nuclear posture was unnecessary due to the implied security guarantees of the Soviet Union. Second, the elimination of Soviet power leaves South Asia with India as a perceived insufficient balance against China and Pakistan. Presumed Chinese transfer of nuclear and missile technology to Pakistan exacerbates India's fear of its northern neighbors.

2. Domestic Political Pressures

In addition to regional security concerns, there are domestic political pressures on India to clarify its nuclear position. The April 1996 national elections resulted in the Hindu nationalist party, the Bharatiya Janata Party (BJP), gaining the largest percentage, although not a majority, of parliamentary

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[19] P.R. Chari, "Indian Defense and Security: A Cost-Benefit Analysis of Nuclear Proliferation," in Kathleen C. Bailey, ed., Weapons of Mass Destruction: Costs Versus Benefits, (New Delhi: Manohar, 1994), 85.

seats.[20] The right wing BJP has long advocated an overt Indian nuclear posture. Its 1996 election manifesto called for the rapid development of nuclear weapons as well as a high technology means of delivery. The BJP promotes hastening the serial production and early deployment of the medium range Prithvi and the long range Agni missiles. Additionally, the BJP disapproves of all international agreements designed to limit India's nuclear program.[21] While the BJP's position on Indian nuclear weapons policy may alarm Western analysts,[22] its position is by no means considered extreme in India. It enjoys significant public support.

3. International Pressures

A third pressure acting on India's nuclear weapons policy is the increased effort of the international community to combat the proliferation of weapons of mass destruction. Along with Israel and historical adversary, Pakistan, India has refused to sign the NPT. Pakistan has consistently stated that it will accept international constraints on its nuclear weapons program with bilateral agreements from India. Western nonproliferation advocates consider this Indian cooperation to be the key ingredient in South Asian arms control. India recently displayed its power and resolve against international efforts aimed at curtailing its nuclear option by vetoing the Comprehensive Test Ban Treaty (CTBT).

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[20] A national news magazine, India Today, provides election results and analysis in its April 15, 1996 issue.

[21] "Missiles Among Top Priorities for New Indian Government," International News, 16 May 1996.

[22] U.S. nonproliferation experts Leonard Spector and Micheal Krepon claim that the BJP's nuclear weapons position would cause a dangerous arms race if they ever came to power. "US Stand On BJP Nuclear Policy Viewed," Navbharat Times, 5 April 1993, 4.

4. Economic Pressures

Finally, Indian policy makers face hard economic realities when considering their nuclear weapons posture. Indian economic reforms, which include an increased dependence on foreign investment, make international acceptance and cooperation essential to financial stability. An Indian nuclear weapons posture deemed irresponsible and provocative by the international community could seriously endanger the foreign investment that Indian seeks.

D. SUMMARY

The future of India's nuclear weapons posture has implications for regional and global security and nuclear weapons proliferation. While India has maintained an ambiguous posture for over twenty years, it faces profound new challenges. While the majority of Indian elites continue to favor the official policy of nuclear ambiguity, there are emerging security, political, international, and economic pressures which demand change.

The following chapters provide three possible outcomes of development in India's nuclear weapons posture. Additionally, each chapter provides contingent generalizations of future changes in the pressures could affect India's nuclear weapons posture. Chapter II argues that the post-cold war environment has produced conditions well suited for Indian nuclear weapons denunciation. Chapter III contends that an overt nuclear weapons posture will be India's most likely option in the future. Chapter IV argues that the emergence of post- cold

war pressures will constrain India from an overt nuclear weapons declaration, and India will continue to maintain its nuclear option thereby preserving ambiguity.

This thesis concludes in the final chapter that India is likely to maintain an ambiguous nuclear weapons posture, all things remaining equal. A dramatic change in one or more of the described pressures, however, may potentially affect the future of India's nuclear policy. The concluding chapter speculates how hypothetical changes in South Asia may influence India's nuclear decision and offers implications for U.S. policy makers and nonproliferation advocates.

II. NUCLEAR ABSTINENCE

"So far as I can see, the atomic bomb has deadened the finest feeling that has sustained mankind for ages."

-Mahatma Gandhi[23]

A. EMERGING POST- COLD WAR PRESSURES

India has a long tradition of opposition to nuclear weapons. Nevertheless, India exploded a nuclear device in 1974 and has maintained a nuclear weapons option for over twenty years. India claims it is categorically opposed to nuclear weapons, and seeks to lead the fight for complete global nuclear disarmament. These assertions persist despite the existence of India's nuclear weapons capability and its isolated position against certain international arms control initiatives.

The global condition which must be met for Indian acquiescence to the NPT and abandonment of its nuclear option is clear. India consistently advocates that global arms control agreements should include a strict timetable requiring nuclear weapons states to reduce and eventually destroy their stockpiles. This compulsory condition must be met for Indian inclusion in a global arms control regime. Given the rising global confidence in nuclear deterrence, the power characteristics of the international system, and the common belief that the world cannot "put the nuclear genie back in the bottle," the realization of India's objective of global disarmament seems remote in the near term.

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[23] India and Disarmament: An Anthology of Selected Writings and Speeches, (New Delhi: External Publicity Division, Ministry of External Affairs, Government of India, 1988), 14.

This chapter analyzes how the emergence of post-cold war pressures contributes to arguments calling for Indian nuclear weapons denunciation.[24] Notwithstanding the weakness of India's nuclear denunciation movement,[25] the emergence of new post-cold war pressures on India's nuclear program provides three strong motives for India to abandon its ambiguous nuclear weapons option. Additionally, this chapter provides contingent generalizations of future conditions which could signal that India will abandon its nuclear weapons option.

First, security pressures encourage the nuclear abstinence option because such a policy would eliminate Indo-Pakistani nuclear parity. This would allow India to strengthen its conventional forces and gain regional dominance. Second, the end of cold war UN Security Council gridlock has given way to immense global nonproliferation efforts. International pressure on India's nuclear posture increases Indian fears of international isolation and sanctions. Third, an outward looking, reformed Indian economy places new monetary demands on India's civilian nuclear program as well as its conventional armed forces, enhancing the benefits of nuclear denunciation.

B. REGIONAL SECURITY PRESSURES

Some critics claim that India's ambiguous nuclear policy undermines regional security.[26] This argument is based on the contention that nuclear weapons not

[24] This chapter does not examine political pressures on the nuclear abstinence option as such pressures generally are ineffectual. India's nuclear abstinence movement is small and is morally, rather than politically, based; thus having little impact on policy makers.

[25] Only eight percent of Indian elites think that abandonment of the nuclear weapons option is a good idea. Bajpai, "Abstaining: the Nonnuclear Option."

[26] The leading Indian opponents to a nuclear weapons option are Braful Bidwai, Aachin Vanaik, Kanti Bajpai, and Ravi Rikhye.

only fail to play a significant role in regional conflicts, but also serve to divert resources from more important conventional forces.[27] To understand the regional security pressures that might influence India to adopt a policy of nuclear abstinence, it is necessary to review India's vision of regional hegemony.

1. India's Strategic Vision

In foreign policy India has pursued non-alignment and self-sufficiency. India seeks "to preserve the country's autonomy of action as an independent power center in the international system."[28] RAND analyst Ashley Tellis describes India's strategic vision as that of a "great power" with "hegemonic status" in South Asia.[29] Pakistan, not China, is seen as the primary obstacle to Indian strategy. Tellis observes that Pakistan represents "the principal impediment to India's core grand strategic objective: *thriving as a great power, with all the security accruing from the possession of that status* (emphasis added)."[30]

Pakistan, Tellis notes, upsets South Asian natural geographical unity by creating a substantial military force which undermines Indian regional hegemony. Additionally, the creation of an Islamic state challenges the

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[27] In contrast, the pronuclear argument contends that India's ambiguous nuclear posture offers deterrent value toward China and Pakistan and that adversaries seriously consider India's nuclear weapons capability before threatening India's national interest.

[28] Chari, "Indian Defense and Security," 84.

[29] Ashley J. Tellis, "South Asia," in Salmay Khalilzad, ed., Strategic Appraisal 1996 (Santa Monica, Calif: RAND, 1996), 283-307.

[30] Ibid., 285.

legitimacy of India's "diverse regional, linguistic, and cultural subgroups."[31] Given Indian strategic objectives, Indo-Pakistani military parity, including nuclear parity is unacceptable to India.

2. Indo-Pakistani Nuclear Parity

In their fifty years of independence, India and Pakistan have fought three major wars; they continue to dispute the status of Kashmir. The relative strength of India's conventional forces has kept Pakistani desires of an Islamic unification with the Muslim majority population in Kashmir at bay. A reduction in India's conventional capabilities helps fuel Pakistani hopes of obtaining control of Kashmir.

In his 1990 book, The Militarization of Mother India, Ravi Rikhye, a self-described hawk, argues that India's strategic goals, political will, and defense spending are inharmonious. He claims that an Indian annual defense budget of six percent of its GNP is insufficient to support India's strategic goals of regional hegemony.[32] He also claims that India's defense budget exceeds the amount needed for a purely defensive posture.

Rikhye prescribes that India should increase its defense spending and acquire the means to project its regional will.[33] Nuclear weapons, having

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[31] Ibid.

[32] India's defense budget has recently declined to an expenditure of only three percent of the national GNP. Avirook Sen, "Casualties of Funds Crunch," India Today, 15 October 1996, 92.

[33] Ravi Rikhye, The Militarization of Mother India, (New Delhi: Chanakya Publications, 1990), 5.

proven little utility beyond that of deterrence, take away from the conventional forces which can influence events in South Asia. Rikhye notes,

> Nuclear weapons are intended for deterrence: if they're used, it's mutual suicide and no purpose has been served. You have to convince the other person that you very well might use them if you're pushed too far, so he shouldn't take the chance.[34]

Further, Rikhye argues that India needs to secure its conventional superiority over its adversary Pakistan. Conventional arms have a deterrent effect as well as military utility.

> It is hard to see what particular advantage nuclear weapons would have over the newer precision-guided weapons. Two missiles creating a 600 psi over pressure against the Enterprise deck or sides is going to create as much of a problem as a nuclear weapon.[35]

Bilateral ambiguous nuclear deterrence allows Pakistan to stand toe to toe with India. This condition of Indo-Pakistani balance is unlikely without the presence of nuclear weapons. Nuclear weapons allow Indo-Pakistani military parity which undermines India's strategic goals of regional hegemony.

Despite international efforts to curb a Pakistani nuclear program, it is able to match India's ambiguous deterrent. Most experts agree that the lack of available fissile material makes its presumed nuclear stockpile much smaller than India's. Numbers, however, are not that important when considering a minimal nuclear deterrent.[36] Pakistan needs to provide only the remote

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[34] Ibid., 99.

[35] Ibid., 101.

[36] For a comprehensive discussion of Indian and Pakistani nuclear sufficiency see Gregory F. Giles, John H. Sandrock, and Lewis A. Dunn, "Nuclear Weapons and Doctrine in India and Pakistan," (prepared for Lawrence Livermore National Laboratory by the Science Application International Corporation, 1993).

possibility of possessing a nuclear weapon to effectively nullify India's conventional advantage.

Ironically, the strategic parity that Pakistan enjoys is best described by a nuclear advocate, former Indian Army Chief of Staff, General K Sundarji. Sundarji argues that an asymmetrical conventional advantage favoring India is useless. He argues,

> even if India were foolish enough to create a large conventional edge, it would be unusable for undoing Pakistan, because of the near certainty that Pakistan would then use its nuclear weapons in extremis.[37]

Sundarji elaborates this contention in his novel, Blind Men of Hindoostan. In his fictional work, Sundarji describes an Indo-Pakistani crisis which parallels the 1990 Indo-Pakistani Kashmir crisis. The crisis occurs when Pakistan "crosses the line" in its covert, yet substantial, support for separatist rebels in Kashmir. Sundarji's novel asserts that Pakistan has engaged in a covert support of guerrillas in Kashmir for years.

In Sundarji's crisis, however, Pakistan risks a broader war with India when it provides regular Pakistani army troops for electronic warfare and anti-helicopter support. Indian strategy demands that India not limit its response to an increased presence in Kashmir. Sundarji contends that this crisis leads to a broader conventional Indian attack in the heart of Pakistan.

Sundarji anticipates that India would use its conventional strength to punish Pakistan for supporting the Kashmiri rebels. This scenario, however, tempts Pakistan to use its nuclear weapons in a preventive manner (against

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[37] General K Sundarji, "India's Nuclear Weapons Policy," in John Gjelstan and Olav Njolstan, eds., Nuclear Rivalry and International Order, (Oslo: International Peace Research Institute, 1996),180.

presumed Indian nuclear weapons facilities and airfields), in a tactical manner (against advancing Indian troops), and as a weapon of terror (against Indian cities).

India's current ambiguous nuclear weapons posture is insufficient to deter Pakistan from any of the above nuclear weapons use. Sundarji points out that conventional tactics require the concentration of force which makes India's troops easy prey to Pakistani nuclear weapons.[38] The Indo-Pakistani conventional asymmetry is nullified by a presumed Pakistani nuclear bomb.

While this fictitious example calls for Indian nuclear clarity, I believe his scenario best supports those who favor regional nuclear arms control. Sundarji contends that an overt Indian nuclear posture would prevent Pakistani use of a nuclear device against invading Indian troops. The events of the real 1990 Kashmir crisis, however, indicate that India was deterred from using its conventional advantage.[39] Therefore, one can argue that Pakistan's presumed nuclear capabilities prevent India from flexing its conventional muscle.

Sundarji's fictional work, as well as the events of the 1990 crisis, demonstrate that regional arms control in the form of bilateral nuclear abstinence would better serve India's regional interests. A bilateral Indo-Pakistani nuclear agreement would eliminate Pakistan's ability to achieve strategic parity and strengthen Indian hegemony in South Asia. Specifically the elimination of Pakistani nuclear capabilities allows India to utilize its conventional military against Pakistan without the threat of nuclear retaliation.

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[38] General K Sundarji, Blind Men of Hindoostan: Indo-Pak Nuclear War (New Delhi: UBS Publishers, 1993).

[39] It is yet unclear why India backed down from the 1990 Kashmir conflict. Investigative reporter, Seymour Hersh, argues that Pakistani actions signaled India that Pakistan was ready to use nuclear weapons, compelling India to de-escalate the conflict. See Hersh, "On the Nuclear Edge."

3. Unilateral Indian Nuclear Renunciation

The previous argument contends that a Indo-Pakistani renunciation of nuclear weapons allows India to use its conventional asymmetry to reinforce regional hegemony over Pakistan. Kanti Bajpai, believes this is a harmful strategy. Bajpai argues that South Asian peace and security requires a bilateral non-nuclear agreement as well as a "leveling down" of conventional forces.[40] Bajpai asserts an imbalance in conventional forces favoring India allows Pakistan to argue that,

> it is cheaper to match India's conventional superiority with nuclear capability than with increased conventional capability. Leveling down to a conventional balance which satisfies both sides and which avoids a costly arms race can overcome this objection.[41]

Bajpai suggests that India renounce nuclear weapons unilaterally. This would undermine hawks in the Pakistani government who perceive conflict with India as inevitable. Bajpai notes that India as the stronger power is in a better position to take this radical step. "When the weaker state calls off a cold war it will be seen as defeat; when the stronger state does so, it must be a gesture of friendship."[42]

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[40] Kanti Bajpai, "Secure Without The Bomb," Seminar 444 (August 1996), 60.

[41] Ibid.

[42] Ibid.

C. INTERNATIONAL PRESSURES

The strongest pressure on India's nuclear weapons posture is the mounting international pressure exhibited in the indefinite extension of the nuclear nonproliferation treaty (NPT). The recent acceptance of the NPT and CTBT by China and France has left India as the isolated standout against these international agreements.[43] Its most recent refusal to sign the CTBT highlights India's lone stance against the rest of the world.

Rikhye argues that any prestige gained by demonstrating nuclear weapons capability is outweighed by the unprecedented global consensus against nuclear proliferation. He writes,

> If it is prestige that we wanted, we should have nuclearised in the late 1960s. The people would have been impressed. Now, with the whole world building up a massive sentiment against these weapons, rather than any prestige to be gained from going nuclear, we are likely to get only disgust.[44]

Despite the global momentum generated by the indefinite extension of the NPT, most Indians continue to reject this arms control agreement and prefer an international agreement which would eliminate the existence of nuclear weapons.[45]

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[43] India, Pakistan, and Israel refuse to sign the NPT. Pakistan vows it will sign both the NPT and CTBT if India signs. Israel has agreed to the CTBT leaving India as the only nation able to prevent the treaty from coming into force.

[44] Rikhye, The Militarization of Mother India, 101.

[45] 83 % of Indian elites "totally support" an global nuclear weapons disarmament treaty. Cortright and Mattoo, "Indian Public Opinion."

1. NPT Opposition

India has a long-standing history against discriminatory arms control agreements. India's policy, which insists that arms control treaties address underlying motivations for conflict, were formed before the advent of nuclear weapons. In 1940 Prime Minister Nehru argued that arms control agreements must deal with the underlying motivations for conflict and must apply universally to all nations. Five years before the existence of nuclear weapons, Nehru wrote,

> Complete disarmament means in essence the ending of wars between national states. This will only take place when the causes of such wars have been eliminated or reduced very greatly. If the causes remain, there will be continuous conflict. . . . If real disarmament is to come, it is essential therefore to tackle this problem and to remove these causes of conflict and war. These causes are many, but briefly they may be summed up as the suppression of one nation by another, of large masses of people by privileged groups, of the uneven distribution of the world's resources which are essential for modern life in any state, of the inequalities between nation and nation and group and group, of haves and have-nots as between nations as well as between groups or classes.[46]

India's stance against the NPT and CTBT is shared by nuclear advocates, ambiguity supporters, and nuclear opponents. These international treaties, Indians argue, legitimize the presence of nuclear weapons. Indians claim that the motives of the nuclear weapons states in the NPT are disingenuous. Indians claim that their stance against these treaties is categorically "anti-nuclear" and not designed in support of their country's nuclear program.

India protests both the discriminatory and legitimizing nature of the NPT and CTBT. The NPT restricts the transfer of fissile materials from a nuclear weapons state to a non-nuclear weapons state. India protested in the 1970's

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[46] India and Disarmament, (Confidential note written at Wardha)25 August 1940,11.

and 1980's, that the United States failed to uphold this principle by deploying nuclear weapons to allied territories in Europe. The U.S. claims that the deployment of a nuclear weapon in an allied territory does not constitute a nuclear weapons transfer and that control and title of the weapons remains with the United States. India, however, claims that examination of NATO Nuclear Planning Group doctrine contradicts these claims, and remains convinced of the disingenuous nature of the NPT.

Additional opposition to the NPT, which continues today, claims that the NPT justifies the presence of nuclear weapons in the hands of the five nuclear weapons states but does nothing to eliminate nuclear weapons. K. Subrahmanyam, a former administrator in India's defense ministry writes:

> If the superpowers did not intend to carry out the provisions of the Treaty why did they sponsor it and what did they achieve through it? The sole purpose underlying the sponsorship of the Treaty was to get their nuclear weapon stockpiles legitimized by the comity of nations. The nations which have acceded to the Treaty have accepted the legitimacy of the nuclear weapons in the hands of five nuclear weapon countries.[47]

Subrahmanyam further contends that the NPT is an agreement bent on maintaining rather than limiting nuclear capabilities. He claims that nuclear-weapons-free zones legitimize the arsenals of the nuclear weapons states and condones nuclear weapons use. He accuses Pakistani leadership of

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[47] K. Subrahmanyam, Indian Security Perspectives, (New Delhi: ABC Publishing House, 1982), 78.

contributing to nuclear weapons legitimization by favoring these discriminatory arms control agreements. The Indian policy, he claims

> is principled and practical, and aimed at bringing about an international convention to ban the use and threat of use of nuclear weapons. The Pakistani policy is one of legitimizing the nuclear arsenals, including, consequently, the Israeli and South African arsenals.[48]

2. CTBT Opposition

India's stance against the CTBT is characterized by a similar argument. A test ban treaty locks in the capabilities of the nuclear weapons states without requiring a reduction or freeze on the quantity of weapons. India presented this argument in rejecting the CTBT in the summer of 1996. India claims its objectives for a test ban treaty have always been linked to eventual disarmament. The CTBT fails to meet this Indian litmus test. The language concerning nuclear disarmament in the treaty's preamble is weak. It suggests that a nuclear test ban may someday lead to disarmament, conceding that the abolition of nuclear weapons is not its primary purpose. India's ambassador to the Geneva Conference on Disarmament, Arundhati Ghose, cites the failure of a time-table for disarmament and new counter-proliferation utilities for nuclear weapons, as reason for India's dissent.

> Substantive disarmament provisions in the treaty have been blocked by some delegations. Weak and woefully inadequate preamble references to nuclear disarmament such as those contained in the draft cannot meet our concerns.[49]

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[48] Ibid., 168-69.

[49] Arundhati Ghose quoted in George Perkovich, "India's Nuclear Weapons Debate: Unlocking the Door to the CTBT," Arms Control Today (May/June 1996), 11.

Additionally, Ambassador Ghose mentioned with alarm, "new doctrines and targeting strategies being developed for nuclear weapons which are attracting consideration for use against chemical or biological attack."[50] Ghose answered India's critics who claim that India's stance on the CTBT is inconsistent with past Indian calls for a test ban treaty. Stating that India's position has always been consistent to an end of global disarmament, Ghose stated, "This was not the CTBT India envisaged in 1954. This cannot be the CTBT that India can be expected to accept."[51]

3. Implications for NPT and CTBT Advocates

India's opposition to the NPT and CTBT must be taken seriously. Many Western arms control advocates claim that India's stance against the NPT in favor of real global disarmament is unrealistic and impractical. Nevertheless, the failure of the NPT and CTBT to adequately satisfy Indian desires for a nuclear free world undermines global nonproliferation. The international community has been thus far unsuccessful at compelling India to forgo its nuclear option. The United States has began to employ nuclear arms control and confidence-building methods rather than depending strictly on a policy of nonproliferation.

U.S. and international pressure on India may help strengthen its stance against the NPT. Akhtar Ali, a South Asian nuclear expert, concludes that nonproliferation efforts have only strengthened India's stance and that new strategies need to be developed. "The nonproliferation community in the U.S.

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[50] Ibid., 11.

[51] K.K. Katyal, "PM's Reply to U.S. to Reaffirm Stand on CTBT," Hindu, 30 June 1996.

needs to adopt a less activist approach in favor of a more realistic effort, at least in so far as South Asia is concerned."[52]

Former U.S. Ambassador to Pakistan, Robert Oakley, agrees and provides suggestions for a more realistic Western approach to South Asian nonproliferation. "Continued rigid adherence to an orthodox but increasingly obsolescent approach, risks delaying serious attention to preventing a major security threat."[53] Oakley suggests that the United States abandon its stated claim for formalized South Asian nuclear denunciation. Instead, U.S. diplomats should work "quietly" and "privately" with both India and Pakistan to convince them to freeze their current programs rather than altogether forgo the nuclear weapons option.

> Alternative compliance and confidence-building measures, pursuing longer-term nonproliferation approaches that rely on quiet dialogue rather than formalized treaties, should therefore be examined. Informal reassurances like those reached among the United States, Russia, and Ukraine-which led to Ukraine's denuclearization could serve as a precedent.[54]

These international pressures -- Indian isolationism and continued efforts by the global community on India to renounce its nuclear capability -- may operate to move India in the direction of nuclear abstinence.

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[52] Akhtar Ali, "A Framework for Nuclear Agreement and Verification," in Stephen Philip Cohen, ed., Nuclear Proliferation in South Asia; The Prospects for Arms Control, (San Francisco: Westview Press, 1991), 267.

[53] Robert B. Oakley and Jed C. Snyder, "Escalating Tensions in South Asia," Strategic Forum 71, no. 4 (National Defense University, Institute for National Strategic Studies)(April 1996), 4.

[54] Ibid.

D. ECONOMIC PRESSURES

This section argues that the economic cost of India's nuclear program justifies denunciation of nuclear weapons. While the majority of Indian elites do not share this perspective,[55] this section asserts that India's civilian nuclear program and nuclear weapons aspirations significantly undermines the potential of its growing economy.[56] The high costs of India's civilian nuclear energy program contribute to a national energy deficit which inhibits the growth of the Indian economy.

1. High Costs of a Nuclear Weapons Option

The costs of nuclear weapons threaten India's security by undermining its economy, making it more susceptible to internal threats. George Perkovich, a South Asian expert, argues that India's security is better enhanced by strengthening its economy rather than developing nuclear weapons. He contends that "India cannot achieve sustained rapid development and raise the living of its 930 million citizens without international cooperation and investment."[57]The costs of building a nuclear arsenal would significantly undermines India's economy.

Arguably, there are economic costs and benefits of nuclear weapons. Nuclear weapons provide a significant amount of military power at relatively low

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[55] Eighty-seven percent of India's elites believe that its civilian nuclear energy program can help meet India's energy deficit and 60 percent believe that nuclear energy benefits far outweigh its costs. Cortright and Mattoo, "Indian Public Opinion."

[56] India's economy is currently growing at ten percent annually.

[57] George Perkovich, "India's Nuclear Weapons Debate," 13.

costs. The "more bang for the buck" argument only works, however, if there is political utility in having nuclear weapons and they are directed towards clear security threats. In the case of India, nuclear weapons and India's subsequent refusal to agree to arms control have contributed to political isolation which undermines its economic potential.

2. India's Changing Economic Policies: From Economic Nationalism to Global Interdependence

The cold war provided India with the Soviet Union as a political and military ally which reduced the impact of global isolation. Post-cold war Indian economics, however, require the full participation of India in the global economy. India's new interest in the global economy makes it more vulnerable to international embargo and isolation, and focuses India's efforts on improving its infrastructure, rather than increasing military power. Former Defense Minister, Arun Singh argues:

> India has come to recognize the fact that multi- dimensional economic and technological global interdependence is vital to the improvement of living conditions for its own population and internal instabilities are best tackled by creating a democratic environment conducive to achieving visible and meaningful economic progress rather than through the acquisition and demonstration of State power. [58]

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[58]Arun Singh, "Indian National Security-A Viewpoint," in New Approaches to South Asian Security (National Defense University, Institute for National Strategic Studies) 19 September, 1996, 9.

India's economic reforms make international cooperation and foreign investment important for India's growth. Any Indian behavior deemed provocative by the international community could jeopardize its economic future.

Cold war Indian economic policy was a product of nationalism, socialism, and a rejection of Western economics. Indian politician, Subramanian Swamy, rejected western economic thought as irrelevant to India. He proclaimed policies he termed "economic nationalism." Economic nationalism consists of *self-reliance, high growth rate, and nuclear weapons.*[59]

Many of India's cold war economic policies were rooted in political goals of non-alignment. Indian economic strategies consisted of "growth through capital accumulation and increased per capita income."[60] India utilized Soviet style five year plans which "were based on a strategy of massive industrialization and capital accumulation."[61]

Understandably, the elimination of poverty was an important economic goal. The strategy employed to reach this goal was "based on achieving growth through the accumulation of capital...reduction in poverty was not to be a trickle-down effect of growth; poverty alleviation was to be achieved though active intervention in the type and level of growth."[62] Foreign investment was viewed

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[59] Subramanian Swamy, Indian Economic Planning: An Alternative Approach (New York: Barnes & Noble, 1971),1.

[60] Shubhashis Gangopadhyay, "The Indian Awakening," SWAI Review, (Winter-Spring, 1994), 139.

[61] Ibid.

suspiciously as Western powers tried to link economic aid and investment with Indian acquiescence to Soviet containment and Western political alignment.[63]

Indian economists believed in the socialist economic model, thus foreign investment was not necessary for India to improve its economic status. Furthermore, some believed that foreign investment undermined India's goals. Swamy adamantly argued against foreign aid and assistance, which he claimed hurt the Indian economy as it restricted who India could buy from and what India did with their products.[64] In general, cold war Indian economists felt immune to Western pressure. Policy makers believed that Indian participation in the global economy wasn't necessary. In contrast to Japan, Hong Kong, and Taiwan, they "felt that India was a large enough country to support sufficiently large markets within its geographical boundaries."[65]

Post-cold war Indian economic policies follow a different path. Indian policy makers now realize that improving their economies is necessary for domestic stability. They accept,

> that their inward-looking, centrally planned economic policies have failed, while the countries that have prospered around the globe are those with dynamic private sectors.[66]

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[62] Ibid.

[63] Robert McMahon provides a comprehensive discussion on India's cold war relations with the United States in The Cold War on the Periphery: The United States, India, and Pakistan (New York: Columbia University Press, 1994).

[64] Swamy, Indian Economic Planning, 24.

[65] Gangopadhyay, "The Indian Awakening," 141.

In order to increase economic growth, India has decentralized state run industries and promoted foreign investment. It is still unclear whether a possible coalition government of the United Front will continue economic reforms started in 1991 by the Congress Party. Nevertheless, Indian economists have come a long way in rejecting the centralized, anti-foreign investment policies advocated by Swamy. India's economic future, however, continues to be undermined by the third theme of Swamy's economic nationalism, nuclear weapons. This section argues that while the economies of the nuclear weapons states have flourished while developing nuclear weapons, India's nuclear power and weapons program significantly undermines its economy.

3. The Impact of Defense Expenditures on Industrial Capacity

India's annual defense spending averages less than four percent of its GNP. Some argue, however, that money spent on India's nuclear weapons program and defense is harmful. Kathleen Bailey argues that the development of nuclear weapons is such an enormous task that human resources allotted to nuclear programs could be better spent.

> There is no way to estimate the cost of nuclear proliferation to India or Pakistan, for example, but it is safe to say that the economic development of both was seriously set back by the drain of exceptional personnel to weapons development and production.[67]

Paul Kennedy offers a complementary argument of the perils of Indian weapons development. He contends that allocation of human resources on military technologies undermines "opportunities for commercial science and

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[66] Charles H. Percy, "South Asia's Take-Off," Foreign Affairs 71, no. 5 (Winter 1992-93), 170.

[67] Kathleen C. Bailey, Strengthening Nuclear Non-Proliferation, (San Francisco: Westview Press, 1993), 99.

(civilian) technology."[68] Subsequently, the failing industrial and technology sections are unable to provide suitable employment, henceforth talented and trained personnel emigrate to the developed world. Both Bailey's and Kennedy's differing definitions of "brain drain" lead to the same conclusion. Resources (both financial and human) spent in weapons development undermine the industrial capacity of India.

Despite the persuasiveness of these arguments, a study conducted by economist and South Asian expert, Robert Looney, concludes that India's defense expenditures do not have a negative impact on India's economic growth.[69] Looney conducted a study of the causality between defense expenditures and gross domestic product in South Asia. Utilizing two twenty-year sub-periods, 1957-1977 and 1967-1987, Looney concluded that "the impact of defense growth was positive, with growth not significantly influencing the government's allocation to the military."[70] His findings indicate that India's modest defense expenditures are not a contributing factor in India's slow growth and troublesome economy. Looney's conclusions are consistent with other economic studies which conclude "that investment and government spending both have a positive impact on growth."[71]

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[68] Paul Kennedy, Preparing for the Twenty-First Century, (New York: Random House, 1993), 181.

[69] Robert E. Looney, "Defense Expenditures and Economic Performance In South Asia: Tests of Causality and Interdependence," Conflict Management and Peace Science, 11, no. 2 (1991), 37-67.

[70] Ibid., 59.

[71] Ibid., 60.

4. India's Energy Crisis

Although Looney's study indicates that India's defense expenditures are not a direct cause of its sluggish economy, there is strong evidence that its nuclear power program directly harms India's potential economic growth. India's nuclear power program, which supplies fissile material for nuclear weapons, has led to a long standing energy crisis which undermines privatization and foreign investment. Thomas Smith demonstrates the nature of India's energy crisis and the significant implications for India's future. "India has endured a crisis in electricity supply for over twenty years, and the problems for the country could become more severe in the future."[72] Smith argues that the implications of its energy crisis precludes any significant improvement in the Indian economy.

> The growth of electric power capacity closely correlates with increases in GNP and an adequate power supply is a prime infrastructure priority for countries seeking to attract and hold foreign investment and sustain rapid economic growth.[73]

For over twenty years India has produced an average of ten to twelve percent less electric power than Indian consumers demand.[74] The ten percent electrical deficit does not do justice to the scope of the problem. Smith points out that the official estimated demand is probably lower than desired amount of Indian electrical power.[75]

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[72] Thomas B. Smith, "India's Electric Power Crisis: Why Do the Lights Go Out?" Asian Survey 33, no. 4 (April 1993), 376.

[73] Ibid.

[74] Ibid., 377

[75] Ibid.

Much of India's energy crisis can be blamed on a disproportionate amount of resources invested in nuclear power. Indian nuclear power plants take decades to build and are disproportionately expensive when compared to their conventional counterparts. Smith notes that,

> Over thirty percent of India's total research and development budget in science and technology has been spent on atomic energy-nearly as much as on agriculture. In the sixth Plan, R&D on atomic energy (not including the operational and construction costs of reactors) amounted to Rs. 5.336 billion, (213 million USD) while the entire R&D budget on other forms of power was to be only Rs. 250 million.(25 million USD)[76]

Despite this enormous investment, nuclear power plants provide only three percent of consumed electricity. The remainder of India's electric power is generated in coal burning thermal plants (62%) and in hydroelectric plants (35%).[77] The poor performance of India's nuclear power plants and subsequent energy crisis is a direct result of its refusal to sign the NPT and accept IAEA safeguards.

The 1974 test of a nuclear device and subsequent refusal to sign the NPT has had lasting negative impact on India's nuclear power production. General Electric built two nuclear reactors at Tarapur in 1969. Two reactors were built by Canada (CANDU) in Rajasthan. India used the Canadian design to build two additional reactors at Madras. There are two more reactors in Narora in Uttar Pradesh and eight additional plants of 235 MW each are planned. Following

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[76] Ibid.

[77] Ibid., 379

India's nuclear test in 1974, India has been subjected to numerous nuclear fuel embargoes and has subsequently had to develop its own heavy water for the coolant in its CANDU reactors. India's indigenous heavy water production has been exceptionally inefficient and heavy water production often lags behind demand.[78]

The privatization of India's power generation industry, the development of gas power plants, and innovative ways to improve efficiency may provide enough confidence to keep foreign interests investing in India. Recent U.S. investments in the Indian economy have grown to 700 million in 1995, from 32 million ten years earlier.[79] Some fear, however, that energy production may not be able to keep pace with the new demands of foreign investment. The proliferation of electronic products and the public's demand for new technology will continue to pressure India's energy industry.[80]

Despite the argument that India's nuclear weapons and nuclear power program has led to an energy crisis which subsequently undermines the future of its economy, most Indian elites have strong confidence in the benefits of nuclear power. Eighty-seven percent of respondents said they believe that the civilian nuclear energy program can help meet India's energy deficit. Only twenty-one

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[78] Ibid., 377

[79] John F. Burns, "India Now Winning U.S. Investment," New York Times, 6 February 95 .

[80] "Power sector, Now at the Crossroads," Hindu, 20 May 1996, 25.

percent conclude, as this paper argues, that the costs of a civilian nuclear energy program far outweigh its benefits.[81]

The dichotomy between the perceived benefits of Indian nuclear power and its actual costs is a result of the proliferation of nuclear myths.[82] Proponents of atomic energy has successfully convinced the citizens of India that nuclear power is a cheap and reliable source of electrical power. Smith notes that India's nuclear bureaucracy has convinced every prime minister India can impress the world with its nuclear technology.[83]

Proponents of Indian atomic energy, however, may be losing influence. India's civilian nuclear power program has faced significant budget cuts in recent years. The Bulletin of Atomic Scientists notes that the government has cut funding on science and technology by 50 percent since 1988 and that the atomic energy's budget has taken a disproportionate hit, falling more than 70 percent in constant dollars.[84] While India's veto of the CTBT signals that India has not completely abandoned its nuclear aspirations, declining dollars and poor performance by India's nuclear program has undermined its influence on national decisionmakers.[85]

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[81] Cortright and Mattoo, "Indian Public Opinion," appendix B, 7.

[82] For a discussion of nuclear myths and Indian nuclear myth makers see, Peter R. Lavoy, "Nuclear Myths and the Causes of Nuclear Proliferation," Security Studies, volume 2, numbers 3/4 (Spring/Summer 1993).

[83] Smith, "India's Electric Power Crisis," 389.

[84] Eric Arnett, "India's Nuclear brownout," Bulletin of the Atomic Scientists, (November/December 1996), 16.

[85] Arnett notes that India operates four of the six poorest performing nuclear reactors and all nine of its monitored reactors are among the 50 least reliable in the world.

E. SUMMARY

The emergence of post- cold war pressures provides strong motivations for India to abandon its nuclear weapons option. A bilateral nuclear denunciation agreement with Pakistan would foster Indian hegemony by maintaining India's significant conventional advantage. A unilateral Indian nuclear weapons denunciation would undermine militant factions in Pakistan and provide a olive branch for a potential long-lasting South Asian peace. The indefinite extension of the NPT and India's veto of the CTBT has left India as the sole significant standout against these globally supported measures. India's ambitious economic reforms requires a steady influx of foreign investment. India's civilian nuclear program contributes to a national energy shortage which undermines the global currency India seeks.

Despite these arguments, Indian nuclear opponents pale in numbers and influence in comparison to nuclear advocates and ambiguity supporters. The lack of support for nuclear abstinence can be attributed to both calculated and coincidental factors. The government of India has prohibited an open parliamentary debate on the costs and benefits of its nuclear program. The 1962 Atomic Energy Act broadly granted

> absolute powers to initiate, execute, propagate, and control exploration, planning and manufacturing of atomic material and its related hardware and all nuclear research and development activities to the sole authority of the Chairman of the Atomic Energy Commission (AEC).[86]

[86] Ibid., 36.

This act allows the government to conceal the inefficiencies and dangers which perpetuate India's civilian nuclear program. The fact that Indians believe that nuclear energy is the answer instead of a contributing cause of the nation's economic problems is no accident. [87]

This chapter contends that emergence of post-cold war regional security, international, and economic realities creates substantial pressure on India to denounce its nuclear weapons option. Nevertheless, there is little support for nuclear abstinence. International agreements which Indians perceive as discriminatory, legitimizing the nuclear arsenals of the nuclear weapons states while subsequently restricting the capabilities of all others, have only strengthened India's stance against the NPT and CTBT. Additionally, the benefits of a nuclear free South Asia and India's subsequent conventional advantage over Pakistan are nullified by the existence of China's nuclear arsenal.

Finally, the benefits of IAEA safeguards and international nuclear cooperation, and the costs of India's civilian nuclear program, are obscured by the propaganda efforts of India's nuclear bureaucracy. The Indian government falsely contends that nuclear weapons provide international prestige, regional security, and economic benefits. While this chapter demonstrates that emerging

[87] Peter R. Lavoy, "Nuclear Myths and the Causes of Nuclear Proliferation," Security Studies, volume 2, numbers 3/4 (Spring/Summer 1993).

post-cold war pressures challenge the benefits of maintaining a nuclear option, the majority of Indian elites continue to hold on to nuclear aspirations. The ineffective nature of these pressures on India's nuclear posture make the future condition of Indian nuclear abstinence extremely improbable. The following contingent generalizations, however, may indicate that India will abandon its nuclear weapons option:

* India's civilian nuclear power program contributes to a national energy crisis which significantly undermines foreign investment and economic growth. Currently Indian elites perceive that nuclear technology is the solution rather than the source of India's energy deficit. *If Indian elites realize that India's energy shortage is caused by its inefficient nuclear power program, denunciation of the nuclear weapons option will become more likely.*

* Pakistan is India's most likely future adversary. Like India, Pakistan displays an ambiguous nuclear posture but, unlike India, has publicly stated that it is willing to consider arms control agreements. The Indo-Pakistani nuclear parity, which Pakistan currently enjoys, is not in India's security interest. *If India perceives that Indo-Pakistani nuclear parity is in Pakistan's best interests, India will strive for a bilateral nuclear agreement denouncing nuclear weapons.*

* International arms control regimes, embodied by the NPT and CTBT are rejected by Indians are discriminatory. The NPT and CTBT fail to adequately address the global nuclear danger. *If the world embraces time-bounded nuclear*

disarmament negotiations, the possibility of Indian inclusion in the NPT becomes more likely.

III. DECLARATION AND DEPLOYMENT: THE OVERT NUCLEAR OPTION

A. NUCLEAR ADVOCATES

India possesses a nuclear weapons capability yet it has refrained from openly developing and deploying a nuclear arsenal. India is the only nation to test a nuclear device without developing an overt nuclear weapons posture. A significant minority of Indian elites say they believe, however, that India should abandon its nuclear restraint and declare and test a nuclear arsenal.[88] These advocates argue that an ambiguous nuclear weapons posture undermines India's security, diminishes its position as a great power, and creates a dangerous strategic environment.

This chapter examines the position of Indian nuclear advocates, and the four pressures which bear on the development of an overt nuclear weapons posture. The four pressures which might affect India's decision to "go nuclear" are: (1) regional security concerns, which are fueled by increased suspicion over Pakistan's nuclear capabilities; (2) domestic political realties demonstrated by the rise in power of the Hindu nationalist BJP, and its uncompromising call for nuclear weapons; (3) international pressures illustrated by the belief of some Indians that India's long-standing rejection of the NPT and most recent standout against the CTBT will pressure Indian decisionmakers to develop and deploy nuclear weapons; and (4) economic costs can and must be overcome in India's quest for the security they associate with nuclear weapons.

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[88] Thirty-three percent of Indian elites advocate the development and deployment of nuclear weapons. Cortright and Mattoo, "Indian Public Opinion," 9.

B. REGIONAL SECURITY PRESSURES

Many Indians view the overt deployment of nuclear weapons as vital to India's security. Brahma Chellaney, an Indian scholar and journalist, argues the realist position that nuclear weapons are a necessary tool in a dangerous world. He writes:

> Security interests demand that either India live in a world moving toward complete nuclear disarmament or it build nuclear weapons.... Without a credible nuclear deterrent, India has little protection from nuclear blackmail and danger such as occurred in the 1971 India-Pakistan war when President Richard Nixon considered using nuclear weapons to prevent Indian forces from decimating what was then West Pakistan.[89]

Chellaney's concerns are shared by many Indians including former Army Chief of Staff, General K.V. Krishna Rao: Rao has little faith in security assurances from nuclear powers. He doubts a nuclear state would risk intervention with its nuclear power to help a non-nuclear state. If India wishes to retain its sovereignty, India must develop its own nuclear weapon capability.[90]

1. Ambiguous Equals Dangerous

Some nuclear advocates claim that South Asia's current status of nuclear ambiguity is dangerous. An ambiguous nuclear weapons posture increases the likelihood of Indo-Pakistani miscommunication and subsequent nuclear conflict. As opaque nuclear states, India and Pakistan have developed the capability to

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[89] Brahma Chellaney quoted in Perkovich, "India's Nuclear Weapons Debate," 13, fn 6. Chellaney is referring to the deployment of the USS Enterprise, a U.S. nuclear powered aircraft carrier, during the 1971 Indo-Pakistani War. Some Indians inferred that the presence of U.S. naval power in the Bay of Bengal was an ambiguous nuclear threat.

[90] K.V. Krishna Rao, Prepare or Perish: A Study of National Security (New Delhi: Lancer Publishers, 1991), 433.

produce nuclear weapons but have not developed a nuclear infrastructure. The presence of presumed nuclear weapons, without command and control mechanisms, is dangerous.

Chief of Staff, General Sundarji, argues that these circumstances could lead to an accidental nuclear exchange:

> I believe that the continuance of an ambiguous nuclear policy from now on will be downright dangerous for two reasons. The first, due to the possibility of a war between India and Pakistan being triggered through miscalculation of each others' nuclear status, as well as ignorance of the nuclear doctrines that the two countries are likely to go by, which would culminate in a tragic nuclear exchange. The second, due to the difficulties of ensuring the prevention of unauthorized use when in a clandestine state.[91]

South Asian nuclear stability depends on bilateral development and deployment of nuclear weapons, which would provide both sides a comprehensive nuclear doctrine.

U.S. strategic analyst, Gregory Giles, agrees with Sundarji on the dangers of undeclared nuclear arsenals. He argues that the secrecy and compartamentalism surrounding clandestine nuclear powers increases the chances for nuclear accidents.[92] Additionally, he notes that defacto nuclear states have failed to invest the essential amount of resources in safety and

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[91] Gregory F. Giles, John H. Sandrock, Lewis A. Dunn, "Nuclear Weapons and Doctrine in India and Pakistan," (prepared for Lawrence Livermore National Laboratory by the Science Application International Corporation, 1993), I-6, fn. 19.

[92] Gregory F. Giles, "Safeguarding the Undeclared Nuclear Arsenals," Washington Quarterly (Spring 1993), 178.

security. He believes that regional crisis and domestic instability undermine the safety of defacto nuclear arsenals.[93]

2. Balance to Sino-Pakistani Alliance

Recent Chinese-Pakistani nuclear cooperation helps maintain the nuclear option as a cornerstone of India's strategy against both of its adversaries. Pakistan, however, remains the primary concern as recent Indo-Chinese relations ironically have improved. The United States and Indian suspect that China has assisted Pakistan in constructing a missile factory south of Islamabad. If true, China took this presumed course in spite of pressure from the United States. The U.S. accused China of violating the Missile Technology Control Regime (MTCR), which China, although not a signatory, had agreed to uphold.

On the other hand, some argue that China's actions and the Pakistani alliance help maintain a regional balance of power. For example, Patrick Tyler argues that China is assisting Pakistan's nuclear and missile program to balance Indian power on the subcontinent. Ironically, China pursues this policy and continues to improve its relations with India.[94]

China and Pakistan developed a cold war alliance which they maintained as a balance against India and Russia. As Russian power declines, however, increased Chinese-Pakistani cooperation has upset the Indian concept of

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[93] Ibid., 184.

[94] Patrick E. Tyler, "China Raises Nuclear Stakes on the Subcontinent," New York Times 27 August 1996.

regional balance. Eden Woon, a former Pentagon specialist on China, describes the relationship between China and Pakistan. Woon writes,

> I don't think most people realize that China and Pakistan are strategic allies...they are as close as the United States is to Britain and while China is trying hard to improve its relations with India, it always remembers that it once went to war with India.[95]

While Woon may be exaggerating the closeness of Chinese-Pakistani relations, his analogy captures the nature of South Asian strategic relations. China's recent assistance to Pakistan forges a path of eventual conflict with India.

Further, enhanced Chinese-Pakistani military cooperation, especially in the arena of nuclear weapons, increases the urgency of India's nuclear decision. As Russian post-cold war power declines and Chinese power continues to rise, India feels more, rather than less, compelled to develop its own nuclear deterrent.

C. POLITICAL PRESSURES

Security pressures are only one indicator that India is serious about its nuclear option. Perhaps the strongest trend that supports a continued and possible expansion of India's nuclear weapons program is rooted in its current political environment. Defense analyst, Ram Subramanian, believes that India, with the tenth largest industrial capacity in the world, can enhance its international image by procuring a nuclear force.[96]

The April 1996 national elections demonstrated India's resolve to maintain its nuclear option, and the elections indicate that a stronger nuclear

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[95] Ibid.

[96] Ram R. Subramanian, Nuclear Competition in South Asia and U.S. Policy, (Institute of International Studies: University of California, Berkeley 1987), 44.

posture may develop in the near future. The Hindu nationalist Bharatiya Janata Party (BJP) currently holds 160 of 543 parliamentary seats. As stated earlier, the BJP advocates a firm, pro-bomb platform. Former BJP President, Murli Manohar Joshi, has repeatedly advocated an overt nuclear weapons capability,[97] and briefly appointed Prime Minister, Atal Behari Vajpayee, who denounced the "nuclear apartheid" of the NPT. Vajpayee stated, "For our own security, India should be well equipped."[98] The unsuccessful attempt of Vajpayee, however, to form a coalition government indicates that the Hindu nationalists have a way to go before mandating Indian policy. Nevertheless, the popularity of the BJP makes Indian global concessions on nuclear issues improbable.

The United Front coalition government, led by Prime Minister Deve Gowda, recently has moved closer to the BJP's position. Its firm stance against the CTBT indicates that the United Front has no intentions on weakening India's nuclear position. In a possible effort to distinguish itself from the already hawkish stance of the Gowda administration, Mr. Brijesh Mishra, BJP foreign affairs activist, put forth a more extreme version of his party's platform.

> The party has categorically stated that India should go ahead with nuclear tests and the implication is that it should declare itself a nuclear power. The BJP has demanded that the Deve Gowda government should lose no time in making a decision on this.[99]

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[97] Varun Sahni, "Going Nuclear: Establishing an Overt Nuclear Weapons Capability," in David Cortright and Amitabh Mattoo, eds., India and the Bomb: Public Opinion and Nuclear Options (Notre Dame: University of Notre Dame Press, 1996), 5.

[98] "Potential Hindu Premier says India must be 'well-equipped'," International News 14 May 1996 .

[99] "Conduct n-tests immediately: BJP," Hindu, 8 August 1996.

Additionally, the BJP stated "that any delay on this score would endanger national security."[100] Thus, given the popularity of the BJP it is likely that the CTBT will remain off the table.

D. INTERNATIONAL PRESSURES

India has rejected the NPT and now the CTBT; yet, it adheres in part to its principles. India has neither proliferated its nuclear capabilities nor overtly developed its own nuclear weapons. Some feel that India's most recent rejection of the CTBT is consistent with its past behavior, and does not signal an upgrade in its own nuclear program. Others argue, however, that India's lone stance against the CTBT imposes a new era in India's nuclear program which could undermine the global nonproliferation effort.

George Perkovich believes the CTBT is a moment of truth for Indian leadership. The CTBT, he argues will push India to abandon ambiguity and develop a clear nuclear weapons policy.[101] In addition he claims that isolating India as the sole CTBT holdout increases international pressure on India to test a nuclear device.

> Once (the) CTBT comes into being in one form or another, India will stand out in the eyes of the world, whether in good light or bad, just as it has stood out at Geneva for stoutly defending its long-hold position. Either it will be seen as a country which gave in at the end, or as one which must be really seriously intending to exercise its nuclear option, which otherwise it would not have defended so stubbornly against such heavy odds.[102]

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[100] Ibid.

[101] Ibid., 11.

[102] Pran Chopra, "Gaps in India's n-policy," Hindu 28 June 1996.

Praful Bidwai, former Senior Editor of the Times of India, agreed that India's veto of the CTBT enhances the possibility of an overt nuclear weapons posture. Bidwai argues:

> An Indian refusal to sign a CTBT makes little sense unless India goes on to defy the CTBT regime in some way. If India were simply to refuse to sign the treaty but remain in the same pre-signing position of threshold ambiguity, then all it would do is to incur the costs of such a refusal, but without its supposed benefits. That is why the CTBT debate over the last two years in India has also been marked by a more intensified discussion than before over two forms which a possible Indian defiance of a CTBT regime could take: one, a test explosion or a series of them; and two, open weaponisation.[103]

Nuclear advocates benefit from the political fallout of the international arms control regime. As a proud, yet underdeveloped state, India gains a sense of power by its stance against the NPT and recent veto of the CTBT. Ambassador Ghose exclaimed to the Indian press after she vetoed the CTBT: "Now for all those who said where the hell is India, they know where India is."[104] India's exuberance at standing up to the developed world is typical of formerly colonized nations. Clifford Geertz argues that the power imbalances between the colonizers and the new states has brought about "nationalist sensitivity to

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[103] Ibid.

[104] Raj Chengappa, "Playing the Spoiler," India Today, 15 September 1996, 76.

outside interference" which is aptly demonstrated by India's hard stance against the international arms control regime.[105]

E. ECONOMIC PRESSURES

Nuclear advocates maintain an optimistic perspective, which claims that India can overcome the high costs associated with nuclear weapons. This is a result of the Department of Energy's claims that promote the economic benefits of nuclear technology and the contention that India must develop an economy less vulnerable to foreign influence. While many nuclear advocates understand the high costs of an Indian weapons program, they contend that India can and must meet this economic challenge in order to maintain its national sovereignty.

India possesses a highly invested, yet poorly developed nuclear infrastructure. Nevertheless, some argue that India's nuclear infrastructure will help subsidize the costs of a fully deployed nuclear program. Brigadier General Vijai Nair, a nuclear advocate, believes that India's extensive civilian nuclear power program, which can produce fissile material, help supplement the costs of a weapons program.[106]

Despite his optimistic assertion, Nair understands that going nuclear is a major undertaking which demands significant Indian effort. Going nuclear would place demands on every facet of the Indian economy including the:

> development of a national command structure; enlightenment of the leadership; viable military capabilities; intricate control, surveillance and targeting systems; real time data links integrated

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[105] Clifford Geertz, "After the Revolution: The Fate of Nationalism in the New States," in his, The Interpretation of Cultures: Selected Essays by Clifford Geertz (New York: 1973), 237.

[106] Vijai K. Nair, Nuclear India (London: Lancer International, 1992), 200.

> into imperishable communication systems; a broad based civil defense structure; primary alerting systems; radiation detection grids and early warning broadcasting facilities; decontamination and specialist medical facilities; environmental control organizations and a host of other allied issues.[107]

Another military nuclear advocate, General Krishna Rao, has a strategic vision which includes a strong economy as a vital element of national security. His vision of the economy is in the Indian tradition of self-reliance. India must avoid reliance on foreign investment least it become vulnerable to foreign interference.[108]

Additionally, Rao understands that India's high rate of population growth may undermine national security: "It has to be ensured that population growth is kept under certain acceptable limits, to ensure that the benefits of development are not diluted."[109] Despite the looming concerns of unchecked population growth and poverty, he maintains that economic growth and nuclear weapons can coexist. He argues,

> while a large percentage of the population lives under the poverty line, India can release funds for a nuclear program without creating unacceptable imbalances provided the program is phased and prioritized pragmatically.[110]

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[107] Ibid., 2-3.

[108] K.V. Krishna Rao, Prepare or Perish: A Study of National Security, (New Delhi: Lancer Publishers, 1991),492.

[109] Ibid., 393.

[110] Nair, Nuclear India, 6.

Chapter II argues that Indian economic reforms of de-centralization and foreign investment make it vulnerable to international economic sanctions. There is evidence that while Indian leaders cannot openly declare concerns about international pressure, they take the threat of economic isolation seriously. Shortly after the Geneva Convention Indian veto of the CTBT, Finance Minister, P. Chidambaram, claimed that India's economy would not be adversely affected by its stand. He stated "in my assessment, there will be no fallout in the economic field on India."[111] Indian trade experts claim that investment opportunities in India's infrastructure are so attractive that foreign and multi-lateral corporations will be encouraged to invest in India despite the reservations of their governments.

The United States helped diminish Indian fears of economic isolation by promising that economic sanctions would not develop as a fallout of the Geneva Conference.[112] The U.S. guarantee of non-sanctions was made by U.S. Secretary of State, Warren Christopher, in a letter written to persuade India not to block a UN vote. Christopher's letter stated,

> You state your objections to the text in as harsh a manner as you feel appropriate. Do not sign it, if you feel your national concerns are not served that way. But do not block its transmission to the UN. At no stage in the future, would you be subjected to coercion because of your non-ratification.[113]

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[111] Hindu, 26 August 1996, 01 col.a.

[112] Ibid.

[113] K.K. Katyal, "Warren Christopher's Letter to Gujral: No Coercion on CTBT, US," Hindu, 9 August 1996.

India's confidence on this issue follows a rationale that the world is hesitant to utilize economic sanctions except under dire circumstance. The U.S. reluctance to sanction China for Missile Technology Control Regime (MTCR) violations, and for suspected Chinese-Pakistani construction of a missile factory south of Islamabad make economic sanctions of India remote. Additionally, Turkey and France have resumed trade agreements with Iran against U.S. desires. India, however, must not mistake the lack of international economic sanctions against the Indian position on the CTBT as a signal that it can test a weapon without penalties.

India has attempted to deflect some of its economic fears by highlighting its economic ties to Russia. Although India faces an allied coalition from the West and China, its fears of isolation are somewhat relieved by its traditionally strong ties to Russia. Russia has joined the world in requesting Indian inclusion in the CTBT. Indo-Russian relations, however, will not be affected negatively by India's decision. Russian officials stated, "We are clear that the recent expression of the Russian position on the CTBT is in no way meant to pressure India and will not affect ties on the bilateral track."[114]

India correctly perceives that a growing economy will help protect it from global economic pressures. The United States has attempted several coercive economic measures to influence Chinese policies with limited success. Some

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[114] Atoll Anemia, "CTBT Row Unlikely to Hit Ties with Russia," Hindu, 7 April 1996.

Indians understand that it will be free from similar tactics only when it develops the economic muscle of a rapid growing economy.

> the best insurance for India against any possible pressure on the economic front would be to notch up successively high economic growth rates and create conditions for expanding trade and investment.[115]

India can feel certain that its ambiguous nuclear posture, and its opposition to the CTBT, will cause very little economic fallout. The testing or deployment of nuclear weapons, however, may incite a very different reaction, one that India must understand.[116]

F. SUMMARY

This chapter outlines the growing pressures on India's nuclear posture. India's nuclear organization continues to apply bureaucratic pressure as elected officials make more vocal cries for nuclear clarity. Sino-Pakistani nuclear cooperation helps maintain India's nuclear option as the cornerstone of its regional strategy. While many nuclear advocates realize the costs of nuclear weapons, they contend that an independent growing economy will protect India from foreign pressure. Despite these demands on its nuclear posture, most Indian elites favor the current posture of ambiguity and India's nuclear posture will probably not change dramatically.

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[115] Hindu, 26 August 1996, 01 col. a.

[116] A former member of the Indian Defense Ministry conceded that while Indian leaders are politically constrained from openly acknowledging its fears of economic sanctions, in private, "They must be thinking about it." Lawrence Livermore National Laboratory Conference on South Asia. September, 1996.

A change in one or more of the pressures, however, can alert outside policy makers of a potential variation in India's nuclear policy. The following contingent generalizations could indicate an Indian overt nuclear weapons posture.

* The right wing BJP has long advocated an overt Indian nuclear posture. Its election manifesto called for the rapid development of nuclear weapons. *If the BJP comes to power, with a clear majority, an overt nuclear weapons posture becomes more likely.*

* The maintenance of the Sino-Indian border agreement is essential to lasting peace between India and China. *If there is a re-militarization of the Sino-Indian border, an overt nuclear weapons posture becomes much more likely.*

* India's growing participation in the global economy makes it vulnerable to international economic and diplomatic pressures. Most Indians perceive internal problems of poverty and ethnic violence as the biggest threat to national security. Fiscal restraints make an overt nuclear weapons posture too expensive. A rapidly growing Indian economy, however, may encourage Indian policy makers to invest more resources in defense. *If India's economy rapidly improves, with several years of sustained economic growth, an overt nuclear weapons posture becomes more likely.*

* India's nuclear posture is directed primarily towards Pakistan. Traditional Indo-Pakistani competition requires India to remain "ahead" of their advisory. *If*

Pakistan tests or deploys a nuclear weapon, India will develop an overt nuclear weapons posture.

IV. MAINTAINING NUCLEAR AMBIGUITY

India deliberately has chosen an ambiguous nuclear weapons posture by acknowledging it possesses the technology for making a nuclear bomb and yet refraining from developing and deploying nuclear weapons. India believes this policy successfully deters potential adversaries who are fearfully uncertain of India's nuclear capability, while at the same time the policy saves India from participating in a dangerous and expensive arms race. Even though most Indian elites feel that the ambiguous nuclear posture "reflects a prudent mix of idealism and pragmatism,"[117] this policy is under attack from domestic and international elements.

A. AMBIGUITY: RESISTING PRESSURES

India faces new security, political, international, and economic challenges in the post-cold war. Regional security concerns and domestic political movements pressure Indian decisionmakers to develop and deploy nuclear weapons, while international and economic pressures call for India to renounce its nuclear weapons option.

This chapter argues that India's current nuclear weapons policy (neither renouncing nor developing nuclear weapons) will survive these emerging pressures. It demonstrates that India's ambiguous nuclear posture is a strategic decision which will endure the test of the post-cold war environment. While the post-cold war environment has encouraged the vocalization of both advocates and opponents to India's nuclear posture, India's nuclear weapons decision

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[117] Fifty-nine percent of Indian elites support their government's policy of nuclear ambiguity. Cortright and Mattoo, "Indian Public Opinion," 3.

making process has not changed and will not be altered by its critics. India's ambiguous nuclear weapons posture will endure the pressures of the post-cold war.

B. SECURITY PRESSURES

The Soviet Union was India's staunch cold war ally. The 1971 Indo-Soviet Treaty of Peace, Friendship and Cooperation provided

> that in the event of an attack or threat of attack on either party they would enter into mutual consultations in order to remove such threat and take appropriate effective measures to ensure peace and security of their countries.[118]

This Indo-Soviet relationship was directed primarily against China. The Soviet Union provided India with significant military and economic assistance.[119] Wang Hongyu, a senior fellow in the Shanghai Center for South Asian Studies, notes that the end of the cold war has given way to improved Sino-Indian relations.

Improved relations between India and China is in the interests of both nations. Increased economic, diplomatic, and military cooperation strengthens India's and China's status in the world. Pairing these enormous markets and growing economies provides both nations with diplomatic leverage.[120] An Indian overt nuclear posture, however, could undermine the recently fostered Chinese relationship. India's security interests are best served when its nuclear posture

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[118] V. D. Chopra, Indo-Soviet Relations: Prospects and Problems (New Delhi: Patriot Publishers, 1991) ,153.

[119] Wang Hongyu, "Sino-Indian Relations: Present and Future," Asian Survey 25, no.6 (June 1995), 548.

[120] Ibid., 549.

is perceived as a balance against weaker Pakistan rather than China. India's ambiguous posture does not threaten China. An overt nuclear posture that includes the deployment of nuclear-capable long range Agni missiles, however, could threaten China and undermine Indo-Chinese relations. P.R. Chari acknowledges that India's missile program "is designed to meet the nuclear threat from China and establish credible deterrent capabilities for this purpose."[121] The importance of Indo-Chinese relations, however, encourages India to refrain from deploying nuclear weapons aimed at China.

Early Indian nuclear planners focused India's nuclear development on a potential threat from China. India's nuclear weapons capability would contribute if necessary to a larger global conflict involving both the Soviet Union, China, and the United States. The end of the cold war and emergence of a Pakistani nuclear capability, however, has made Pakistan's capability the prime impetus for India's nuclear posture. Table 4-1 demonstrates the relative importance of the perceived Pakistani threats over perceived threats from China.[122]

Why India Should Develop Nuclear Weapons?

Threats from nuclear Pakistan	57%
Threats from other nuclear powers	27%
Threats from China	20%

Table 4-1

[121] Chari, "Indian Defense and Security," 91.

[122] Cortright and Mattoo, "Indian Public Opinion."

When Indian elites were questioned on their opinions of the use of nuclear weapons, Pakistan, not China, emerged as the focal point of India's nuclear decision in table 4-2.[123]

When Could India Use Nuclear Weapons?

If Pakistan were about to take over Kashmir	33%
If China were about to overwhelm India militarily	23%

Table 4-2

George Perkovich argues that an overt nuclear weapons posture would threaten Indo-Chinese accord and undermine Indian security. While an ambiguous nuclear weapons posture is directed primarily towards Pakistan, the deployment of nuclear weapons would be perceived as a threat against the Chinese. India does not have the economic resources to quickly produce a nuclear arsenal on par with China's nuclear force.[124] An Indian overt nuclear

[123] Fifty-nine percent of Indian elites support their government's policy of nuclear ambiguity. Cortright and Mattoo, "Indian Public Opinion," 3.

[124] Perkovich argues that it would take decades for India to build a "secure, survivable, minimal deterrent" towards China.

posture would generate a Sino-Indian nuclear arms race; a race it which India is already way behind. Perkovich concludes that:

> the decision to deploy a (Indian) nuclear arsenal, therefore, could decrease rather than increase Indian security for generations to come.[125]

Kanti Bajpai, an opponent of Indian nuclear weapons, shares this view with Perkovich. An ambiguous nuclear posture, Bajpai argues, will undermine Indian security by making it a future target of every nuclear power. Bajpai suspects that China may already target India from missile sites in Tibet. U.S. and Russian targeting of India would become more likely if clarity replaces ambiguity. Bajpai believes that an overt nuclear weapons posture would make India the target of every nuclear power including China.[126] While this has little military impact (the targeting of strategic targets takes minutes), it has a psychological impact. The United States and Russia frequently remind their respective publics that they no longer have nuclear weapons pointing at them in order to increase security perceptions. Bajpai argues,

> Nuclear ambiguity may deter an equally ambiguous Pakistan, even China, but it may also expose India to several further layers of nuclear threat, thereby greatly increasing its strategic risk.[127]

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[125] George Perkovich, "After The CTBT: Now Come the Hard Choices for India," Henry L. Stimson Center South Asian Security Series 9 October 1996.

[126] Kanti Bajpai, "Secure Without The Bomb," Seminar 444 (August 1996), 58.

[127] Ibid.

Recent improvements in Sino-Indian relations make the evolution of an overt Indian posture improbable. While India and China still have a long-standing border dispute, in 1993 both sides agreed to settle the issue without military force. The Agreement on Maintenance of Peace and Tranquillity along Sino-Indian Border Areas stipulates:

> that border issues should be settled through peaceful and friendly negotiations, that neither side should use force or threaten to use force against the other, that the two side should strictly respect and observe the line of actual control and keep military forces in the area to a minimum.[128]

The maintenance of this agreement and enhancing Indo-Chinese relations takes precedent over the nuclear issue. Indians understand they have to choose between military competition or economic cooperation with Beijing. India should seek prestige and power on the economic, social, diplomatic and political arenas. The increasing power and status of Germany and Japan should serve as an example to India. Indian competition with the Chinese "is civic and economic, not military and nuclear."[129] Given its national interest in a growing economy, India will continue to pursue peaceful engagement rather than risk military confrontation with the Chinese.

[128] Hongyu, "Sino-Indian Relations," 548.

[129] Bajpai, "Secure Without The Bomb," 58.

C. POLITICAL PRESSURES

The fall of the Congress party and rise of the BJP were ultimately replaced by the United Front Coalition. While the BJP gained the largest percentage of parliamentary seats in the national elections in the spring of 1996, it was unable to convince other political parties to join it in forming a coalition. Its radical positions alienated both centrist and leftist parties. The result? The BJP government lasted less than one month and was replaced by a moderate United Front Government.

Presently, the parties making up the United Front Government have few political interests in common and are loosely organized around five separate parties.[130] Its policies are driven from interests from the left as well as the long-standing Congress Party. Its mandate, if any, is generated by a lack of trust in the corruption-ridden Congress Party, and a fear of radical rule by the BJP. The precarious nature of the United Front Government,[131] makes it improbable that it will make any new or radical foreign policy changes.

Thus, although nuclear advocates may be gaining influence through the BJP, there is no guarantee of a future overt Indian nuclear weapons posture. The uncertainty surrounding the attempt of the United Front to form a coalition

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[130] Inderjit Badhwar describes the balancing act of the Deve Gowda government in "United Front: Pitfalls and Problems," India Today, 30 June 1996.

[131] Only nine percent of voters predicted that the UF would last a full term. "BJP Gaining More," India Today, 30 June 1996.

indicates that current nuclear posture will probably not change under this administration. Raja Mohan points out that political instability makes it less likely that Indian leaders will be restrained by foreign nonproliferation advocates.

> The great powers may find it impossible to wring concessions from New Delhi on such issues as nuclear policy and Kashmir given the current political instability in India and the reluctance of any weak government to be seen as yielding to outside pressures. In short, India can transform its domestic political weakness into foreign policy strength.[132]

This argument corresponds with the negotiation concept that it is difficult to obtain concessions from a divided democracy. Fred Ikle, a expert in negotiation and diplomacy, argues that domestic instability constrains international negotiators which "can lead to greater initial demands and more rigid commitments than if a party were all of one mind."[133]

Despite this constraint, Mohan suspects that Indian diplomats have agreed secretly to curtail India's nuclear weapons program.

> There is considerable suspicion in the country, despite the denials of the Indian Government, that its leaders may have given commitments not to cross certain lines on the nuclear and missile programs.[134]

This suspicion, that Indian policy makers are secretly restrained by the international community, has not yet been validated.

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[132] Raja Mohan, "Perils of the Back Channel," Hindu 30 May 1996, 12, col. c.

[133] Fred C. Ikle, How Nations Negotiate (New York: Harper & Row Publishers, 1987) .

[134] Mohan, "Perils of the Back Channel," 12, col. c.

D. INTERNATIONAL PRESSURES

The indefinite extension of the NPT strengthens India's determination to maintain a nuclear weapons option. India's long term goal of global nuclear disarmament insists that India maintain an ambiguous nuclear posture in defiance of the NPT. Both nuclear denunciation and an overt nuclear posture would undermine India's global disarmament strategy. India's objection to the NPT and CTBT is that it legitimizes the stockpiles of nuclear weapons. To India the NPT and CTBT imply that the possession of nuclear weapons is permissible so long as no nuclear tests are conducted and no new nations develop nuclear weapons. This is unacceptable to India.

While many nations see the NPT as "a political commitment to refrain from acquiring nuclear weapons,"[135] India perceives the treaty to be an attempt of nuclear weapons states to legitimize their own weapons. Although the NPT was extended indefinitely, the non-inclusion of nuclear capable India, undermines its efficacy.

I.K. Gujral, the United Front's new External Affairs Minister, reiterated India's commitment to maintaining the weaponization option until all nations agree to abolish their nuclear arsenals:

> My national security demands that I reserve our nuclear options. We will not sign unless I am satisfied that if I give up my option the rest would follow. What we have been trying to do is to make the blessed treaty (CTBT) credible. We want to give it some flesh, some teeth so that we *really eliminate nuclear weapons.*[136] (emphasis added)

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[135] Kathleen C. Bailey, Strengthening Nuclear Non-Proliferation (Boulder: Westview Press, 1993), 3.

[136] Raj Chengappa, "I'll Give More than I Take: Interview with I.K. Gujral," India Today, 30 June 1996, 39.

E. ECONOMIC PRESSURES

Chapter II argues that maintaining a nuclear option has undermined the Indian economy. It contends that India's civilian nuclear program has contributed to a energy crisis which threatens foreign investment and financing in infrastructure. Most Indians elites, however, do not agree with this assessment, as seen in table 4-3. [137]

Opinions About Civilian Nuclear Energy Program

Civilian nuclear energy program can help meet India's nuclear energy deficit.	87%
The benefits of a civilian nuclear energy program far outweigh its cost.	60%
A civilian nuclear energy program can be more harmful than beneficial.	26%
The costs of a civilian nuclear energy program far outweigh its benefits.	21%

Table 4-3

Despite optimistic claims about the benefits of the civilian nuclear program, many experts have argued that the economic costs associated with weapons production will restrain India's nuclear posture.

George Perkovich noted in a recent luncheon discussion at the Stimson Center that an Indian overt nuclear weapons posture would be too expensive for the Indian economy. Increases in intelligence, warning, and command and

[137] Cortright and Mattoo, "Indian Public Opinion," table 6.

control systems would require major budgetary increases. He argues, "were India to deploy nuclear weapons, the direct and indirect costs borne by everyday Indians would skyrocket."[138] Given India's concern of maintaining high economic growth rates, an overt deployment of nuclear weapons is unlikely.

The recently elected United Front Government has declared "a seven percent annual growth rate in GDP to be a strategic priority for India." Perkovich argues that the nuclear weapons production would exacerbate India's fiscal deficit, which and undermine economic growth. [139] He notes:

> India's prime ministers have historically been very sensitive to the economic costs of further advances in their nuclear program. This sensitivity, in turn, helps account for India's significant restraint in this field. It would be difficult to imagine how any Indian government could benefit politically from the diversion of resources away from economic development and social welfare programs to greater spending on nuclear weapons.[140]

India has hinted that its recent decline in conventional military capability may tempt decisionmakers to consider the nuclear option as a method of increasing military power at lower costs. A recent Indian finance report demonstrates the weakness and ineffective nature of India's conventional forces. Traditionally, India has planned its defense on a hardware and modernization project. India's defense spending is characterized by a quest for the latest and

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[138] Perkovich, "After The CTBT."

[139] Ibid.

[140] Ibid.

best technology. While high technology programs, such as aircraft carriers and nuclear propelled submarines may not satisfy any of India's strategic concerns, the latest technology pacifies Indian desires to maintain technological parity with the west. Defense officials now, however, recognize the process of hardware acquisition, notwithstanding strategic requirements, as self defeating.[141]

Indian defense officials recognize the ineffective nature of hardware acquisition without linking equipment to strategies. A recent Indian Finance Ministry Report criticized the three services for concentrating more on capital intensive military hardware, such as aircraft and ships, while failing to budget for a number of priority areas such as force-multipliers, sensors, logistic support, missiles and communication support.[142] While this report fails to mention the nuclear weapons question, it focuses the procurement process away from hardware acquisition to a strategically based defense program. "A clear national security policy has to be formulated, defining the country's goals and the role India should play in the region."[143]

Another Indian government report contends that nuclear weapons may be the result of shrinking military budgets and capabilities. The Institute of Defense Studies and Analyses, New Delhi, recommends that India's conventional forces

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[141] Former financial adviser at the Defense Ministry, Amiya Ghosh, claims that India needs to better match its defense spending with its strategic requirements. Vivek Raghuvanshi, "Finance Report Faults Government For India's Severe Defense Decline," Defense News (October 14-20, 1996),98 .

[142] Ibid., 98.

[143] Avirook Sen, "Casualties of Funds Crunch," India Today, 15 October 1996, p. 92.

receive a minimum annual investment of three percent of the GDP. Anything less than 2.5 percent would undermine the credibility of India's conventional forces and require the deployment of nuclear capability.[144] This recommendation assumes that India utilize nuclear weapons to bolster its military power with less resources.

Perkovich is skeptical of potential conventional arms savings created by the deployment of nuclear weapons. He believes cuts in conventional forces are improbable. The security threats facing India internal. India faces a host of ethnic disturbances, border skirmishes, and problems in Kashmir. Nuclear weapons cannot abate these internal security threats.[145] General Sundarji, a nuclear advocate, agrees that India's primary threats are internal. He asserts that political opportunism inciting conflict among India's ethnically and religiously diverse population "creates doubt about India's prospects and ability to retain its unity amid its diversity."[146]

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[144] Ibid.

[145] Perkovich, "After The CTBT."

[146] General K Sundarji, "Internal Threats to India," Hindu, 5 November 1996, .

Indian fears of the growing challenge of internal rather than external threats is further validated by Brahma Chellaney. He believes,

> The most prominent domestic development is the growing internalization of security threats. The escalating ethnic, sectarian, and regional unrest in the country will increasingly force Indian Security planners to look inward.[147]

A growing economy and strong police force will be India's tools to combat its internal threats. The emergence of threats from within the state diverts resources away from strategic forces designed to combat an external threat. The rise in ethnic and religious conflict will preoccupy Indian decisionmakers in the near future. Indian concentration on internal threats averts attention from a potential overt nuclear weapons posture thereby strengthening Indian nuclear restraint.

F. RESTRAINING EFFECTS OF THE U.S. - INDIAN ACCORD

The end of the cold war provided a fresh start for U.S.-Indian relations. The ideological differences have been eliminated and many Indians hope that the United States and India can forge stronger relations based on mutual respect.[148] Chellaney argues that improving ties with the United States helps

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[147] Brahma Chellaney, "India," in Mitchell Reiss, Bridled Ambitions: Why Countries Constrain Their Nuclear Capabilities (Washington D.C.: The Woodrow Wilson Center Press, 1995) 169.

[148] India's External Affairs Minister stated he hoped that a new relationship with the United States could develop based on mutual respect. Quoted in Chengappa, "I'll Give More Than I'll Take," 39.

restrain India's nuclear program. "The warming ties with the United States make it harder for India to ignore Western pressure and chart a confrontational path toward nuclear weaponization."[149] He warns, however, that overt U.S. pressures on an Indian decision could backfire, "since such pressure could inflame Indian nationalist movements."[150]

India's growing dependence on foreign investment and trade has not persuaded India to forgo its nuclear option. Chapter II demonstrates that while India is sensitive to economic sanctions, it will not be blackmailed into renouncing its nuclear weapons option. India's active participation in the global economy, however, does appear to be restraining any overt nuclear ambitions. Chellaney argues that,

> India's severe economic constraints are unlikely to go away soon. Indeed, they have bred external constraints on any India move to weaponize. Recourse to multilateral institutional borrowing has brought sustained pressure on India for military restraint and regional arms control. India's radical economic reforms need the support of Western capital and technology if they are to succeed. This need, as well as New Delhi's credit dependence on Washington-based multilateral institution, has given the United States some political leverage over India.[151]

This argument seems to validate the warnings of cold war economic nationalist, Subramanian Swamy. He admonished foreign investment and called for self-

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[149] Chellaney, "India," 175.

[150] Ibid.

[151] Ibid., 174-75.

reliance.[152] Indians must now acknowledge that their new interdependence with the global economy has given leverage to international arms control efforts. While this leverage has been thus far unsuccessful at "rolling back" India's nuclear weapons capabilities it clearly contributes to Indian restraint.

G. SUMMARY

The emerging security, political, international, and economic pressures strengthen India's current policy of nuclear ambiguity. The 1993 Sino-Indian accord "agreeing to disagree" without military force was an important Indian strategic accomplishment. An overt nuclear weapons posture, coupled with intermediate range missiles, could threaten Beijing and the recent improvements in Sino-Indian relations.

The indefinite extension of the NPT has legitimized the nuclear arsenals of the five nuclear weapons states. This discriminatory agreement is unacceptable to Indians who demand global nuclear disarmament. India will remain a holdout to the NPT until the NPT addresses India's desire of a nuclear free world. The recent parliamentary victories of the Hindu Nationalist BJP has vitalized the center of Indian politics. Fearful of right wing BJP control, the left and moderates of the Congress Party are willing to compromise in order to keep the BJP and its nuclear aspirations at bay.

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[152] Subramanian Swamy, Indian Economic Planning: An Alternative Approach (New York: Barnes & Noble 1971).

The post-cold war economic reforms have placed fiscal constraints on India's defense and nuclear aspirations. Now more than ever, national decisionmakers will concentrate on industrial and infrastructure requirements in order to build domestic stability. An overt nuclear weapons posture, in the current absence of external threats to national security, will not be achieved.

While this chapter concludes that nuclear ambiguity will continue to be India's most likely nuclear policy, there remains domestic and international pressures which could erode India's nuclear posture. The following contingent generalizations, however, could help stabilize India's ambiguous nuclear posture.

* The Congress Party has dominated India politics for over fifty years. Most Indians believe that the recently elected United Front Coalition will not survive a full term. The next national election may determine the future of India's nuclear policy. If the Congress Party returns to power India's ambiguous nuclear posture will stabilize.

* From India's perspective, the indefinite extension of the NPT, is a step backward for global nuclear disarmament. In India's view, the non-nuclear members have accepted the everlasting presence of nuclear weapons within the nuclear weapons states. If the NPT continues to be unchallenged boy other non-nuclear weapons states, India will maintain its ambiguous nuclear weapons posture.

V. CONCLUSION

Given current security, political, international, and economic pressures, India will continue to maintain an ambiguous nuclear weapons posture for the foreseeable future. This conclusion, however, depends on the current conditions prevailing over the next five years.[153] A major change in any one of the conditions addressed in this thesis could alter India's nuclear weapons posture. Changes in the current conditions suggest likely directions for the future of India's nuclear weapons posture.

A. INDIAN NUCLEAR WEAPONS DENUNCIATION IS HIGHLY UNLIKELY

Finding: ***Unless the Nuclear Weapons States embrace global nuclear disarmament, international arms control regimes will continue to be ineffective in convincing India to abandon its nuclear option.*** The indefinite extension of the NPT and India's veto of the CTBT has mobilized nuclear opponents, ambiguity supporters, and nuclear advocates against an international arms control regime they perceive as discriminatory.

Implication: New *U.S. approaches to the India's nuclear posture need to be developed.* Nonproliferation advocates should focus their attention on arms control and confidence building measures between India and Pakistan instead of international agreements which India soundly rejects. Former U.S. Ambassador to Pakistan, Robert Oakley, suggests that the United States use its substantial intelligence capability to reduce South Asian nuclear tensions.[154]

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[153] The United Front's term is scheduled to end in 2002. It would be unwise to speculate the future of India's nuclear weapons posture beyond that date.

These technically-driven confidence-building measures could reduce the risk of a nuclear exchange.

A January 1995 Speech, given by U.S. Secretary of Defense William Perry, to the Foreign Policy Association demonstrates that the current administration seeks the cooperative engagement this thesis recommends. Perry said,

> We find India and Pakistan's position on nuclear proliferation unpalatable. But to use this as a reason to disengage from the region, or to avoid deepening our security ties with these nations, could undermine efforts to cap their destructive capability. It could help push them into an unfettered arms race that would be disastrous. I believe that we can best help to avoid the disastrous by building bridges of trust between the United States and India.[155]

Finding: ***While India's civilian nuclear power program has contributed to a national energy crisis which undermines the Indian economy, most Indians believe that nuclear power will help solve India's energy crisis.***

While investment in India's nuclear power program has decreased over the past five years,[156] India continues to invest a disproportionate amount of resources on nuclear energy. The Indian Atomic Energy Commission expends the majority of all energy production R&D resources; yet only provides three

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[154] Robert B. Oakley and Jed C. Snyder, "Escalating Tensions in South Asia," Strategic Forum 71, no.4 (April 1996), 4.

[155] Secretary of Defense William Perry speaking to the Foreign Policy Association, January 31, 1995, New York, New York.

[156] The Indian government has cut the budget for the Atomic Energy Commission seventy percent in constant dollars since in 1988. Eric Arnett, "India's Nuclear Brownout," Bulletin of Atomic Scientists (November/December 1996), 15.

percent of the current energy demand. India's nuclear power reactors are some of the worst in the world and India's refusal to except IAEA safeguards on its nuclear program contributes to the inefficiencies of the industry.

The IAEC's woeful record, however, seems to go unnoticed by the majority of elites who believe that nuclear power is a potential solution rather than a cause of India's energy shortage.

Implication: ***Nonproliferation advocates should attempt to link economic benefits with nuclear weapons denunciation.*** When Indian elites and businessmen perceive that their nuclear program undermines the economy, they will begin to pressure national decisionmakers to abandon India's nuclear option.

Finding: ***The rising political power of nuclear advocates represented by the BJP prevents any serious discussion of abandoning the nuclear option.*** While the nuclear aspirations of the BJP who demand an immediate overt nuclear weapons posture will most likely be unrealized, their surge in political power prevents national leaders from seriously entertaining denunciation.

Implication: ***The BJP is a significant political party and not a fringe group. Any international denunciation of the Hindu nationalists would most likely catalyze their supporters.*** The United States should continue to refrain from any involvement in Indian politics. Any U.S. overt support for a moderate Indian political group would only undermine their credibility.

Finding: ***Concerns about a Pakistani nuclear weapons capability compel India to keep the nuclear weapons option open.*** While Pakistan has announced publicly that it would consider a bilateral nuclear weapons

denunciation agreement with India, there will always be the possibility of a future nuclear weapons capability in Pakistan. This possibility will compel India to keep its nuclear weapons option alive. Recent covert nuclear weapons programs by Iraq and North Korea demonstrate the precarious nature of international arms control regimes. As signatories to the NPT, Iraq and North Korea were still capable of developing significant covert nuclear weapons programs. While the potential nuclear weapons programs of these rouge states has been temporarily averted, their existence undermines the credibility of international arms control regimes. Many Indians must fear that Pakistan's nuclear capability may never "be put back in the bottle."

Implication: ***Nonproliferation advocates should continue to encourage Pakistani nuclear weapons restraint.*** India's and Pakistan's nuclear weapons postures are inseparable linked. Nonproliferation advocates must address the South Asian nuclear problem by dealing with both defacto nuclear arsenals.

B. INDIA WILL CONTINUE TO REFRAIN FROM AN OVERT NUCLEAR WEAPONS POSTURE

Finding: ***Improving Sino-Indian relations help to restrain an overt nuclear weapons option.*** The recent Sino-Indian reduction in border hostilities is a sound diplomatic solution for India. As India continues to engage in the global economy, relations with economic superpower China is paramount. Any provocative Indian gesture could upset contemporary Indo-Chinese détente, undermining India's economic aspirations. An ambiguous nuclear weapons posture adequately serves India's security interests with China. India will continue to refrain from an overt nuclear weapons declaration.

Implication: ***The United States should encourage Sino-Indian accord.*** The U.S. should utilize its improving relationship with India and China to encourage a final border solution.

Finding: ***Despite the rise of the BJP, there is not an overwhelming political movement for overt nuclear weapons declaration.*** While the BJP has captured the largest percentage of parliamentary seats, it is unable to form a majority coalition. The formation of the United Front demonstrates that Indian political parties are willing to compromise to contain the aspirations of the right wing BJP. While the BJP has developed the largest single political party in India, the majority of Indians reject the agenda of the Hindu nationalists.

Additionally, it is not certain that, given an opportunity, the BJP would carry through their nuclear aspirations. When given the opportunity of leadership, the BJP demonstrated a more moderate stance than demonstrated in their minority rhetoric. Briefly appointed Prime Minister Atal Behari Vajpayee ambiguously stated "for our own security, India should be well equipped."[157] As a minority party, however, the BJP declares that India should be an overt nuclear weapons power. While the BJP was not in a position to take action on the nuclear weapons issue during their brief period of leadership, the softening of nuclear rhetoric demonstrates that, given the chance, the BJP may not develop an overt nuclear weapons posture for India.

Implication: ***The United States should encourage political stability through economic cooperation***. Without publicly claiming a political preference, the United States should encourage Indian participation in the global market.

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[157] "Potential Hindu Premier Says India Must be "Well-Equipped," International News, 14 May 1996.

Finding: ***The Indian concern of economic growth and stability outweighs their defense aspirations.*** The end of the cold war helped generate aspirations of regional hegemony and power projection in the Indian defense community. Plans of nuclear propelled submarines and aircraft carriers dominated post-cold war Indian naval planners. Fiscal realities, however, have all but destroyed any Indian hopes of power projection beyond its immediate borders. Policy makers have demonstrated that a growing economy and domestic security is more important than defense spending. In addition to conventional defense cuts, India's nuclear power program also suffers from declining budgets. India's atomic energy budget has fallen 70 percent in the past ten years.[158]

Implication: ***The United States should consider trading conventional weapons with India.*** India's conventional forces stabilize South Asia. Insufficient Indian conventional forces generate Pakistani aspirations of unification with Kashmir and fuel arguments that India needs a nuclear deterrent. U.S.-Indian security cooperation could bolster Indian conventional power and stabilize the region.

C. INDIA WILL MAINTAIN AN AMBIGUOUS NUCLEAR WEAPONS POSTURE

Given current security, political, international, and economic pressures, India will continue to maintain an ambiguous nuclear weapons posture in the foreseeable future. The following contingent generalizations, however, provide future indicators for changes in India's nuclear policy.

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[158] Arnett, "India's Nuclear brownout," 16.

1. Nuclear Weapons Denunciation Becomes More Likely If...

* *Indian elites realize that India's energy shortage is caused by its inefficient nuclear power program.*
* *India perceives that Indo-Pakistani nuclear parity in Pakistan's best interests.*
* *the world embraces time-bounded nuclear disarmament negotiations.*

2. An Overt Nuclear Weapons Posture Becomes More Likely If.....

* *the BJP comes to power, with a clear majority.*
* *there is a re-militarization of the Sino-Indian border.*
* *India's economy improves, with several years of sustained economic growth.*
* *if Pakistan tests or deploys a nuclear weapon.*

D. CONCLUSION

India has maintained an ambiguous nuclear weapons posture for over twenty years. It is the only nation to test a nuclear weapon without continuing its nuclear program to weapons development. This thesis concludes that India is likely to continue displaying its ambiguous nuclear weapons posture. While the post-cold war world has witnessed new pressures on India, the motivations for India's nuclear option are the same. International arms control efforts continue to ignore India's desires for global nuclear disarmament. Border disputes with nuclear capable Pakistan, and nuclear power China persist. The high costs of nuclear weapons, and a consistent commitment to global disarmament continue

to contribute to Indian nuclear restraint. While the pressures on India's nuclear policy have changed, the myths of nuclear security and influence remain.

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