Chapter IV

Incentives and Disincentives for Proliferation

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An analysis of proliferation suggests a number ot broadly applicable incentives and disincentives for acquiring a nuclear weapons capability. The usefulness of those generalized incentives (or disincentives) for gaining insights into the motivations of specific Nth countries varies from country to country. Moreover, such a list can be representative, but not exhaustive. In the majority of instances, however, the decision to proliferate will, explicitly or implicitly, be based on some composite of the factors listed below. This composite varies over time with the unique characteristics of each country and the evolution of its national affairs.

Before examining general incentives and disincentives it may be helpful to identify specific countries of particular importance in assessing the past and future course of proliferation. This includes states in three categories: weapon states, major refrainers, and Nth countries. The list of countries under the latter two headings is necessarily selective.

Weapon States	*Selected Major Refrainers*	*Selected Potential Weapon States (Nth Countries)*
Us. U.S.S.R. UK France - China India[b]	Sweden Japan Fed. Rep. of Germany	Argentina Brazil Israel[a] South Africa Iran Pakistan Taiwan South Korea

[a] Widely reputed to already possess one or more weapons.
[b] Has exploded a nuclear device but apparently has not converted that device into an actual weapon.

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GENERAL INCENTIVES

Deterrence

The primary incentive for many states to acquire nuclear weapons would be to deter external efforts to undermine or destroy the existing regime or governmental system. A state would have a particularly strong incentive to acquire a nuclear capability if it feared it could not succeed in sustaining its independence by conventional military or diplomatic means. Several countries on every list of potential new nuclear weapons states (e.g., South Korea, Israel, and South Africa) have had reason to fear direct attack or long-term deterioration of their security *vis-a-vis* non-nuclear neighbors or regional adversaries. On the same list are other countries (e.g., Taiwan and Pakistan) that are concerned about threats to their security from states that have demonstrated a nuclear weapons capability.

For many Nth countries, the effectiveness of nuclear weapons as a deterrent to adversaries seem questionable. This is because of the likelihood that a small number of nuclear weapons would have limited effectiveness in regional conflicts between Third World states. This would seem particularly true where the bulk of the population is dispersed in rural villages and where the terrain lends itself to small unit guerrilla-type operations.

Despite such considerations, the relatively less sophisticated political and military strategies of the majority of Nth countries do not preclude the acquisition of a capability for deterrent purposes, one that U.S. analysts would judge as ineffective by Western standards.

Increased International Status

There can be little doubt that a nuclear weapons capability is an important symbol of modernity, technological competence, and thus a source of status and prestige. In a world in which a minority of states control most of the wealth, power, and expertise, the rest struggle for economic independence, self-respect, and a place in the sun. Nuclear weapons may serve to bolster a nation's self-confidence and win respect from or engender fear in neighbors, adversaries, and the world's great powers. By some readings, though not all, the single Indian explosion contributed materially to many of these objectives.

Aside from its symbolic significance, a nuclear weapons capability may also be an actual source of power. Over time a new nuclear state could probably increase its influence within regional security arrangements, in U.N. Security Council and General Assembly deliberations, and other international forums. This would probably not happen rapidly or by conscious choice of other participating states, Instead, it would be a rather natural evolutionary result of enhanced prestige and subtle alterations in the psychological orientation toward the emergent nuclear nation. The translation of military power into political power may be gradual and subtle, but it is real nonetheless.

Domestic Political Requirements

This point is closely related to the preceding in that international status can serve to bolster a government's domestic political standing. Moreover, the demonstration of technological and administrative achievement associated with the construction of nuclear weapons may offset or distract from the frustrations of national poverty and the difficulties of economic and political development. Benefits of a nuclear program might range from enhanced political stability to the retention of qualified scientists (not only in the nuclear field) who would otherwise be tempted to emigrate to countries with stronger scientific establishments. Many analysts have interpreted the Indian detonation as being motivated in large part by domestic political considerations.

Economic Considerations

In the past, a nuclear weapons program has sometimes been characterized as having a technology-forcing function, in that it stimulated the development of related economically beneficial technologies. This proposition carries less weight today because of the enlarged global commitment to civilian nuclear energy, i.e., the commitment to nuclear energy is adequate by itself to realize any technology spinoffs.

Economic concerns generate pressures toward proliferation in another way. In the future, some states that are unwilling to rely on the United States or the Soviet Union for security may develop global or at least continental economic interests. They may conclude that the protection of expanding economic interests requires enhanced military capabilities —including nuclear weapons. Paradoxically, the success of the development programs of some large Third World states could provide proliferation incentives as. strong as those caused by their present frustrations.

Increased Strategic Autonomy

It is a truism that sovereign states seek to achieve and maintain freedom of action, even with regard to allies. Within an alliance, a nuclear-armed nation may perceive itself (or be perceived by others) as having more options for pursuing national objectives than a non-nuclear state, This relative autonomy differs by situation and objective. It can be argued, however, that a nuclear capability generally contributes to the enhancement of strategic autonomy. This is one of the central reasons ascribed to the development of France's nuclear force.

Strategic Hedge Against Military and Political Uncertainty

Uncertainties concerning the capabilities and intentions of both adversaries and allies can generate a sense of political and military vulnerability y. States may seek nuclear weapons as a hedge against such an apprehension. Concerns about the cohesiveness of Western alliances have increased during the past decade, as there has been less convergence of political interests and increased stress due to differing economic situations and policies. The nuclear parity of the United States and the U.S.S.R. has seemingly lowered the credibility of the U.S. nuclear guarantee in many Western capitals.

"A Weapon of Last Resort"

In an extremely adverse situation where a nation is on the verge of defeat, a limited number of nuclear weapons could be used as a "weapon of last resort." The objective would be to terminate hostilities on terms other than total defeat or, perhaps, to employ punitive measures at the moment of defeat. Nuclear weapons are valued not only for their deterrent effect, but also for their actual battlefield utility. Isreal is often cited as a country which might desire (or have) nuclear weapons not to prevent the outbreak of a conflict as much as to place ultimate limits on military operations. The "weapon of last resort" concept may be the most broadly acceptable rationale for nuclear weapons because it is directly related to the survival of the nation in a specific and clearly defined situation.

As an Instrument of the Third World

Frustrated Third World nations may view nuclear weapons as "equalizers" in their relations with the industrialized world. The emergence of additional nuclear weapons states will complicate the ability of existing nuclear countries to calculate political outcomes, tending to make them more restrained when pursuing their national interests, Moreover, it is argued, concern about the escalation of a regional nuclear conflict into a global conflict will make developed countries more receptive to the economic development concerns of the Third World.

No one would pretend or expect a nuclear explosion to actually solve any of the very serious economic and social problems of the

less developed countries or remove the basic inequity of the world's economic system. Still, the acquisition of nuclear weapons might be perceived by some governments and political elites as a means of commanding the attention of the industrialized world. The frustrations of national poverty and the difficulties of economic and political development might therefore prompt a government to seek a nuclear "solution. " Explicit threats to proliferate if aid or reform of the world economic system is not forthcoming seem unlikely, but not inconceivable. It is also possible to imagine a scenario in which an impoverished nuclear weapons state falls into desperate economic straits and tries to use its nuclear capability to coerce the international community into rendering aid.

Peaceful Nuclear Explosions (PNEs)

The potential benefits of peaceful nuclear explosions (PNEs) were aggressively stressed in the late 1950's in the United States. This view has been subsequently and vigorously echoed in the Soviet Union. These statements by the superpowers, coupled with the conclusions of several international conferences during the 1960's and early 1970's on the peaceful uses of atomic energy, fueled the expectation of numerous developing nations concerning the benefits of nonmilitary nuclear explosions, However, enthusiasm has waned rapidly in the United States as additional studies and tests concluded that the expense and environmental hazards of PNEs are not matched by economic or scientific benefits. The U.S.S.R. has continued a PNE program, claiming a variety of possible applications, although their enthusiasm for such a program may be declining. Despite these trends, many developing countries retain a view that the benefits of such devices exceed their costs. Consequently, the desire to obtain such benefits provides an incentive to develop a nuclear explosive capability. However, a low-technology device, which would be the initial product of a weapons program, is not credible as a PNE for cost and radiological reasons described in chapter VI.

GENERAL DISINCENTIVES

As with the preceding incentives, the general disincentives which inhibit or constrain the proliferation process apply with varying degrees of importance to any particular Nth country.

Diversion of Resources

The classic argument in developed and developing countries is that a nuclear weapons program is not an optimal use of limited national resources. The opportunity cost of foregone economic or social programs are thought to significantly exceed the benefits of acquiring nuclear weapons. The growth of the nuclear power industry and the concurrent decline in the incremental cost associated with a weapons program has tended to somewhat reduce the strength of this disincentive in many countries, Moreover, the diversion of resources argument did not prevent either the Peoples Republic of China (PRC) or India from acquiring a nuclear explosive/weapons capability.

Adverse Public Opinion

While domestic public opinion adverse to nuclear weapons development is far from universal, it remains one of the most important constraints on the acquisition of nuclear arms. Examples most often cited are Japan, Sweden, Switzerland, and Canada, The almost monolithic public opposition to nuclear weapons in Japan is attributable largely to the use of two weapons on that country during

World War II. A strong tradition of neutrality and advocacy of humanitarian ideals characterize the basis for Swedish and Swiss public opinion against the acquisition of a nuclear capability. Such traditions have also characterized India, illustrating that these constraints are not absolute but can be expected to change as national circumstances dictate.

Disruption of Assured Security Guarantees

The disruption of established security guarantees is another disincentive to going nuclear. Reliance on nuclear guarantees constitutes one of the most important elements in many national strategies for coping with the superior military capability of adversaries. In this situation, operating under the umbrella of a superpower's nuclear armaments constitutes a logical and strategically sound approach. Some proliferation analysts are concerned that the erosion of U.S. nuclear guarantee credibility (due to perceived shifts in the political will to employ a military response in situations in which the United States is not directly threatened), has decreased the strength of this disincentive.

Infeasibility of a Desired Nuclear Strategy

The inability to attain a desired nuclear weapons capability within a given time or resource limitation is another disincentive to the acquisition of nuclear arms. While a token- or modest-force deployment may have political utility in some instances, it may not solve a country's requirement of deterring a rival through deployment of a survivable second strike force. A rudimentary, highly vulnerable nuclear force usable only for a first strike may even tempt an adversary to launch a preemptive attack. Other disincentives associated with the infeasibility of a desired nuclear strategy may derive from limitations associated with delivery systems. Range, penetration requirements, and command-control limitations may lead to the conclusion that a nuclear force is not sufficiently effective to warrant development and deployment.

Adverse International Reactions

Another disincentive to proliferation could be the anticipated adverse reaction by other nations, especially the superpowers. However, the United States and the U.S.S.R. have not developed an agreed position or even made arrangements for consultations with regard to any future proliferation events. The reaction of Washington and Moscow to a near-nuclear country's crossing the threshold therefore could vary from mild to strong and positive to negative. In the case of India, the United States voiced mild disapproval but did not undertake any clearly linked diplomatic response or attempt to develop a multilateral forum for the condemnation of the act. There was no apparent condemnation from the Soviet Union at all. The lack thereof was interpreted in most quarters as a judgment on the part of the U.S.S.R. that a nuclear-armed India was a useful factor in constraining Chinese actions. Nevertheless, the prospect of a strong negative response to proliferation by one or both superpowers may restrain some of the near-nuclear countries. Fear of such an adverse response is most effective with Nth countries which are dependent to some degree upon at least one of the superpowers for military, economic, or technical aid. Judging from the Indian experience, a potential proliferator need not fear censure from the international community as a whole. If such a reaction could be expected, it might constitute a significant disincentive.

Adverse Reactions by Adversaries

One of the greatest disincentives is the anticipated response by an adversary—a response that might range from a diplomatic protest to a preemptive attack designed to destroy a nuclear weapon manufacturing capability or to inflict a military defeat. The adversary might also acquire its own nuclear force. This could be very destabilizing in a regional context, since the majority of nuclear states would probably not have the resources to develop a full second strike capability and token forces might thus encourage preemption in crisis situations.

Advocacy of Neutralist Aims

Near-nuclear countries, such as Sweden or Switzerland, that advocate neutralist positions eschew the acquisition of a nuclear weapons capability because they see it as seriously degrading the credibility of their arms control and neutralist positions. Judging from the actions of India and the Peoples Republic of China—both self-proclaimed leaders of the nonalined—the need to be consistent in this regard is questionable. New Delhi and Peking rationalized their decision to acquire nuclear-weapons with the argument that their effectiveness in arms control negotiations would be enhanced and the Third World strengthened if they possessed nuclear arms.

There is an additional concern in those Nth countries where domestic political stability is a serious problem. A national nuclear weapons stockpile would be a national target for seizure by revolutionary groups, terrorists, or coup factions. If such a group obtained possession of all or part of a nations nuclear arms, its potential for coercing the government would be very substantial.

MOTIVATIONS OF EXISTING WEAPONS STATES

General

This section reviews the motives that led the existing nuclear weapons states to acquire such a capability. After a brief description of the origins of the U.S. and Soviet programs, four case studies are developed describing the considerations that led the United Kingdom, France, the People's Republic of China (PRC), and India to justify acquisition of nuclear weapons. The common features and outstanding differences among them are identified in a brief concluding net assessment. Brief analyses of the factors which influenced the Federal Republic of Germany (FRG), Japan, and Sweden to decide not to proceed with nuclear developments are included in appendix 1, volume II.

The U.S. and Soviet Programs

The United States Decision To Acquire Nuclear Weapons

The decisionmaking process by which the United States acquired its initial nuclear weapons capability shows the influence of strategic (i.e., military-security) considerations, scientific and technological factors, economic motives, and other drives. There can be little doubt that the dominant motives were strategic with respect both to the initial fission-bomb decision and to that involving the H-bomb somewhat later. Although it is true that President Roosevelt had to be persuaded that the nascent American nuclear program held sufficient scientific promise to warrant the investment of men, money, and technological resources necessary for its successful completion, he made it clear from the onset that it was the military potential of nuclear fission *vis-a-vis* the Axis Powers which most interested him.

So too with President Truman's decision to build the H-bomb. After the explosion of the Soviet "Joe I" A-bomb in 1949, it was clear that the nuclear program of the U.S.S.R. had progressed more rapidly than many had expected. In the context of the prevailing international climate of the postwar world, Truman believed that a U.S. failure to proceed rapidly with the development of thermonuclear weapons would amount to a surrender of leadership in the nuclear field to the Soviet Union with resulting dangers for American security.

The Soviet Decision "To Acquire Nuclear Weapons

Like that of the United States, Soviet nuclear decisionmaking has been dominated by strategic considerations, especially by the

dynamics of the postwar bipolar competition. It is worth recalling that Soviet military doctrine and practice have always stressed the necessary connection between the possession of superior military power and the successful achievement of political objectives. It was thus untenable that Western developments in military technology should not at least be paralleled by developments in the U.S.S.R. Consequently, a nuclear research program was initiated in the Soviet Union as early as 1942. The first Soviet graphite reactor went into operation in December 1946, and, following several earlier claims that Soviet scientists had solved the problem of the atomic bomb, the first U.S.S.R. atomic device to be fully tested was exploded on August 29, 1949. Work on thermonuclear weapons was already underway, and the Soviet's first such device was detonated only 4 years later. Stalin has been accused by his critics, both in the West and within the U. S. S. R., of failing to appreciate the significance of nuclear weapons for military strategy. His repeated stress on "the permanent operating factors" of war helped to prolong the preeminence of ground-force oriented military thinking in the U.S.S.R. Still, in retrospect it is clear that he was at least implicitly aware of the importance of nuclear weapons for the future world "correlation of forces," and acted accordingly.

The Case of Britain

The Decisions

In April 1940, the British Government established the Maud Committee to explore the feasibility of constructing a uranium bomb. Based upon the committee's affirmative findings and prediction that the bomb's destructive power could prove decisive in war, the Government decided to proceed with development; but the press of war caused Britain to defer its independent quest in favor of cooperative development with the United States. After the war the Attlee Government sought to perpetuate Anglo-American nuclear cooperation, but was rebuffed by the passage of the U.S. Atomic Energy Act of 1946, which explicitly prohibited the transfer of nuclear weapon materials or information to any other nation. The British responded by initiating their military nuclear program in 1947. The first British nuclear explosion was recorded on October 3, 1952, followed by their first hydrogen bomb test on May 5, 1957.

The Rationale

The British decision in the late 1940's to acquire nuclear weapons was dominated by considerations of security and international influence.[4]

Nuclear weapons were thought to provide a powerful military deterrent, constituting a potent instrument of national security. They were seen as giving Britain a voice in world councils and have been seen as enabling London to exert some leverage over its powerful American ally within NATO. Their development was also viewed as maintaining the country's scientific and technological momentum.

The strongest motivation for acquiring nuclear weapons was probably British uncertainty about its American alliance. The memory of American isolationism in the interwar period led thoughtful Britons to question if they might once again have to face great odds alone. s Concern over U.S. reliability surfaced again in 1956, when the Suez Crisis demonstrated that there could be a wide divergence between American and British policies. The 1957 Defense White Paper noted that the national nuclear force would provide protection against the day when American and British policies might diverge as they had in 1956.

Special Circumstances

The British decision to acquire nuclear weapons can be traced to the U.S. decision to terminate the Anglo-American sharing of

[3] Part of the following material has been drawn from a report submitted to the DOD.

[4] Andrew J. Pierre, *Nuclear Politics: The British Experience with an Independent Strategic Force 1939-1970,* (London: Oxford University Press, 1972), p. 1.

[5] Robert M. Lawrence and Joel Larus. *Nuclear Proliferation: Phase II* (Lawrence, Kansas: University of Kansas Press, 1974), pp. 2-4.

nuclear technology that had developed during World War 11. In all probability, however, London would have eventually opted for some sort of independent nuclear weapons capability regardless of Washington's policy. The British moved to acquire national nuclear arms, in part to reestablish themselves as an international force just at the time the empire was beginning to crumble, and in part to demonstrate their continued progress and value to a powerful American ally. While the first goal proved elusive, the second was partially realized with the 1958 Bilateral Agreement for Nuclear Sharing between the United States and the United Kingdom. Preservation of that special relationship has been a continuing goal of British foreign policy.

The Case of France

The Decision

Although the French force de *dissuasion* is linked to President De Gaulle in the public mind, the decision to develop a nuclear arsenal was made under the Fourth Republic. The French Atomic Energy Commission, created in 1945, had developed the expertise and facilities to begin a weapons program by 1954. We know comparatively little about how the decision was actually made, but a major role was apparently played by lower-level scientists and officials who took important steps toward a bomb capability without being clearly directed to do so from the Government above. The first French nuclear-test detonation took place on February 13, 1960.

The Rationale

The French public rationale for acquiring a national nuclear force is highly sophisticated and was developed after the fact in the 1960's. As articulated by President De Gaulle and others, it holds that a small nuclear force is capable of deterring nuclear attack by a superpower under certain circumstances. Such arguments contended that it was unrealistic to assume that America would risk nuclear destruction, except in response to a direct Soviet threat to the continental United States. French strategists therefore contended that France should have the capability of "tearing off an arm, " that is to deliver nuclear strikes against a limited number of Soviet cities. This would presumably accomplish three objectives. First, it would compel Soviet planners to contemplate the cost to the U.S.S.R. of any aggression against Europe. Second, it could, under certain circumstances, trigger an American strike against the Soviet Union to preempt a Soviet attack. Third, a French national force would, by its very existence, make it impossible for the superpowers to fight a limited nuclear war in Europe without risk to their respective homelands.

Some French theorists made even more elaborate claims for French nuclear forces in the 1960's. General Pierre Gallois argued that the proliferation of nuclear weapons, particularly the French national force, would contribute to international stability by constraining the aggression of existing nuclear powers.[6]

The arguments in the Gallois book have been widely quoted and cited around the world, showing up particularly in India before that country's nuclear explosives decision.

In addition to such strategic formulations, French spokesmen also advanced the rationale that the possession of nuclear weapons would give Paris a voice in NATO Councils at least on a par with London's. Anglo-American amity, as reflected by the special working relationship established between the United States and the United Kingdom in nuclear matters, was a persistent source of irritation and resentment to the French. An illustration of this phenomenon was France's response to the Nassau Agreement between the Anglo-Saxon Powers in 1962. The French perceived that agreement both as a manifestation of a U.S. attempt to perpetuate dominance over its NATO partners, and as a reflection of the British proclivity to accord higher priority to their U.S. connection than to the goal of European cooperation in security matters.

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[6] Pierre Gallois, *The Balance of Terror*, (Boston: Houghton Mifflin, 1961).

Other arguments for a French nuclear force voiced by French officials in the 1960's included the need to offset West German economic dominance of the European Economic Community, and the importance of maintaining a high-level scientific and technological capability.

Special Circumstances

The postwar period had been difficult for France. Defeat and occupation in World War 11 were followed by the loss of the colonial empire in Indochina, North Africa, and elsewhere, and the retreat from Suez under U.S. and Soviet pressure. President De Gaulle felt these stings to French pride acutely, and viewed the acquisition of a nuclear weapon capability as a means of restoring national elan.

The Case of the People's Republic of China

The Decision

We know much less about the Chinese decision than about our other cases. The Chinese exploded their first bomb on October 16, 1964, and it is reasonable to assume that they had already attached high priority to a nuclear weapons project seven or more years earlier. In the aftermath of the Peking-Moscow split, oblique references were made to a 1957 Sino-Soviet nuclear cooperation agreement, which may have been intended to include assistance on weapons. In any case, in 1963, the Chinese charged that the U.S.S.R. had abrogated the 1957 agreement and that Soviet technical assistance had been phased out in 1959– 1960. Although this disruption and withdrawal of key personnel delayed Chinese progress, the nuclear weapons program received priority attention and culminated in the 1964 detonation.

The Rationale

Chinese public statements have at all times tended to deprecate the significance of nuclear weapons. While this might be taken to show an ignorance about military strategy, Chinese investment in nuclear and thermonuclear bombs suggests that other explanations for these statements must be found. At times, it has simply made sense for Peking to present this view because it saw its own nuclear arsenal as not yet comparable to that of an American or Russian adversary. At other times, it served domestic political and ideological purposes to stress "man over weapons, " or "red over expert. " Denigration of nuclear weapons as "paper tigers" served to bolster the morale both of Chinese forces and Third World revolutionary movements (e.g., in Vietnam) confronting adversaries with superior military equipment, including nuclear arms.

The Chinese rationale for acquiring nuclear weapons must be inferred as there has been no open discussion of how Chinese weapons might be employed. Initially, they were probably sought to deter American attack and neutralize the ability of the United States to use nuclear threats in confrontations with China, notably during the Korean War, the Taiwan Straits Crisis (1954-55), and the Quemoy and Matsu Crisis (1958). Peking's determination to acquire a nuclear weapon capability was hardened by the realization that the U.S.S.R. was not prepared to risk military confrontation with the United States to achieve purely Chinese objectives in Asia. Later, nuclear weapons came to be viewed primarily as a deterrent to Soviet attack. China has focused its ballistic missile program upon intermediate range ballistic missiles (IRBMs) with the range to strike Soviet, but not overseas, targets. They serve other purposes as well, notably as support to China's drive for great power status and international influence, and as a deterrent to the introduction of nuclear weapons in any local Asian conflict by an outside power.

The Chinese reject the NPT as an instrument of the "imperialist nuclear monopoly," and prior to obtaining their own capability, encouraged other "progressive" countries to acquire nuclear weapons in the interest of breaking that monopoly. Since 1964, however, such endorsements of nuclear proliferation to other states have disappeared. Also, China has

gone beyond other weapon states in repeatedly affirming that it will never be the first to introduce nuclear arms into a conflict.

Special Circumstances

The Sine-Soviet split had a profound effect on the Chinese nuclear program. Withdrawal of Soviet assistance forced the PRC to fall back on its own resources, and no doubt slowed the development of a nuclear arsenal, Meanwhile, deterioration in Sine-Soviet relations caused a change in China's reasons for acquiring such an arsenal. The force that was once seen as a deterrent to U.S. aggression and a means of perhaps forcing a withdrawal of U.S. forces from Asia came to be viewed principally as a deterrent to a Soviet attack.

The Case of India

The Decision

An understanding of Indian motives in detonating a nuclear explosion on May 18, 1974, may provide a better insight into the phenomenon of proliferation than the other case studies outlined above. This is due in part because of the recentness of the Indian explosion, but also because many of the near-nuclear countries most likely to acquire weapons before 1985 are developing countries like India. It should be noted, however, that in certain important aspects India is atypical of the Third World, e.g., its very large cadres of scientific manpower.

Although officials in New Delhi declare that India has no intention of developing nuclear weapons, the 1974 "peaceful" nuclear explosion raises the possibility that India could acquire a modest nuclear weapons capability within a very few years. The major constraint would appear to be the availability of special nuclear material (SNM).

Rationale

Various official and unofficial arguments have been advanced in favor of India exercising the nuclear weapon option. Some of these may be taken at face value, but others may mask deeper motives, It is sometimes contended that India needs nuclear weapons to maintain a strategic military balance against China, which could otherwise be achieved only by sacrificing India's position of nonalinement (i.e., by dependence on the Soviet Union's nuclear guarantee).[7] Another argument has been directed at an alleged double standard on the part of the superpowers, who seek to deny nuclear weapons to India but not to themselves. Two at least equally serious motivations involve the acquisition of a weapon, first, as a source of domestic political prestige for the regime by rekindling national pride through a demonstration of Indian technological achievement, and second, as a means of providing at least symbolic confirmation of Indian preeminence in the subcontinent, *vis-a-vis* Pakistan.

Special Circumstances

The inherent difficulty in maintaining governmental authority over so vast and disparate a nation may have inclined the regime towards dramatic initiatives to command popular attention and support; the detonation of 1974 may have been such a move.

India has prided itself on a pacifist tradition, having effectively used Gandhi's nonviolent tactics to win independence from Britain. It was one of the earliest states to proclaim a policy of nonalinement and has long been a recognized leader of that movement. On the other hand, India was one of the first nations in the less-developed world to invest in a major nuclear research program. The incipient tension between these two developments is reflected in India's present anomalous status as a nuclear explosive, but not nuclear weapons, state. The tension is reinforced by the fact that India, as one of the largest Third World states, is a natural aspirant to great power status. The recent change of government in India would seem likely to shift the political balance in favor of

7 K. Subrahmanyam, "India: Keeping the Option Open," in Lawrence and Larus, op. cit., p. 133.

the former tendency and against the latter for the time being.

Net Assessment of Existing Nuclear States

A review of the cases presented above suggests that two incentives stand out: security-deterrence considerations, and the desire for international influence and status. Only China among these six countries can be said to have initially developed nuclear weapons in direct response to a threat of attack, For the others the more credible danger was a deterioration in their security over time vis-a-vis possible adversaries. The result could have been a growing vulnerability to coercive diplomacy, and with it a loss of international influence and freedom of action. The culmination of this process, short of war and actual conquest, could be victimization by nuclear blackmail. Beyond these two basis concerns, the motivations for selecting the nuclear weapons option become more diverse befitting the particular circumstances of the nations concerned.

It is noteworthy that none of these states were dissuaded by economic costs or by possible international censure associated with nuclear weapons. The emergence of China and India as nuclear weapons is of particular relevance to the future course of proliferation, since most Nth countries are to be found among the roster of Third World nations. The fact that two poor and modestly industrialized countries could embark on an explosives program indicates the accessibility of the new technology and the extent to which even a relatively undeveloped nation can command the resources for its application.

A thorough assessment of proliferation should give some attention to those nations that clearly possess the capability to construct nuclear weapons but, for one reason or another, have not done so. Appendix I of volume II contains brief case studies of three major "refrainers": The Federal Republic of Germany, Japan, and Sweden.

CASE STUDIES OF NTH COUNTRIES

Introduction

As previously noted, a viable analysis of the prospect for future proliferation must take into account factors peculiar to each potential weapons state. What follows are brief illustrative assessments of three Nth countries: Argentina, Pakistan, and Taiwan. Additional case studies are included in appendix I, volume II.

Argentina

Background

Argentina is a country of 25 million people living in territory extending almost half the length of South America and including an area of over 1 million square miles. It is the second largest nation in South America in area and population, surpassed only by Brazil. Argentina is a Republic and has been variously ruled by a President and National Congress or by a military junta. There have been 11 presidents since 1955, of which 6 have been deposed in coups d'etat. Political violence and terrorism are frequent to the point of being traditional, and government alternates between popularly elected leaders and self-appointed ones. Argentina has at times been a federal republic with delegated power on the state and local level, and at times a unitary government with provincial officials holding power at the pleasure of the central government. The population is generally literate, education is compulsory and free, and is available from the primary through the post-doctoral level of training.

Although industrialized, Argentina derives its chief income from agriculture and livestock. The country is equipped with the

administrative, commercial, and transport infrastructure typical of a modern industrial state. However, many types of machinery and equipment (including most heavy machinery) employed within the country are not manufactured domestically and must be imported. There is a moderate standard of living with considerable variation between the very poor and the very rich. Labor unions are very active among the working force, which comprises close to a third of the population. Cereals, beef, and wheat are the principal exports and serve to pay for those items that must be imported for industrial use. Per capita GNP is second only to Venezuela in South America and is about 30th in the world, yet Argentina is constantly burdened with inflation which affects domestic policy as well as foreign trade.

Argentina shares a long common border along the Andes with the Republic of Chile, while its northern and northeastern frontiers are shared with the much smaller nations of Paraguay, Bolivia, and Uruguay, as well as with Brazil, a much larger country in population and area. Uruguay can be considered a kind of buffer-zone between Brazil and Argentina, countries which tend to be rivals with one another. While Argentina participates in worldwide trade and requires imports to maintain its economy, its chief interests lie within the continent of South America and in the Antarctic.

Argentina's armed forces are adequate for national defense and the navy has the strategic reach to operate some distance beyond coastal waters,

The nature of government in Argentina is such as to permit fabrication of nuclear weapons without an expression of national consensus on the issue.

Incentives for Acquisitions of Nuclear Weapons

- The desire for a modern, powerful armed force, capable of maintaining Argentina as an important power in South America.
- Belief that the strength of the regime will be enhanced domestically if Argentina enjoys the prestige of being a nuclear power within the international community.
- Rivalry with Brazil. Concern that Brazil, with its larger population, national territory, and greater resources, may one day attempt to dominate its neighbors.
- The determination to maintain an independent policy in world affairs, requiring both international prestige and an impressive military capability.

Disincentives to Proliferation

- Anticipation that foreign nuclear assistance and exports to Argentina would be embargoed.
- Concern that Argentine proliferation will alarm Brazil and Chile, and trigger a nuclear arms race within South America.
- Fear that nuclear weapons may fall into the hands of terrorists or extremists and be used for purposes of extortion.
- Anxiety that the control of nuclear weapons will become the means of achieving power domestically within Argentina.

Technical Capabilities

As a moderately industralized nation, Argentina is fully capable of recruiting the scientists and engineers required for the development of nuclear weapons. While the Argentine financial situation often appears precarious, exports of grain and beef furnish a reliable source of capital for acquiring those materials not available within the country.

In terms of nuclear technology and facilities, Argentina is the most advanced country in Latin America. Argentina enjoys a fairly plentiful supply of natural uranium from which its first nuclear power reactor has been fueled, a natural uranium reactor which is now onstream. Argentina also has three research reactors, a pilot heavy-water plant, and a laboratory-scale reprocessing facility, There are unconfirmed reports that the latter is being expanded. The first power reactor at

Atucha was constructed by the German firms of Siemens, Kraftwerk Union, and Ruhrstahl. A second reactor is being built with Canadian and Italian participation, and is projected to go onstream by 1979. It is hoped that at least six nuclear reactors will be in operation by 1985.

There appears to be no technical or administrative impediment to Argentina's acquiring nuclear weapons. In fact, the chairman of the country's National Atomic Energy Commission has stated publicly that Argentina has the capability to construct weapons, although it is not presently attempting to do so. It is noteworthy that officers or former officers of the armed services have occupied positions on the Commission.

Argentina has been trying to obtain a complete nuclear fuel cycle, including full-scale heavy water and reprocessing facilities. Efforts thus far to import these facilities have been rebuffed by potential suppliers.

Argentina's choice of natural uranium-fueled reactors and the studies and experiments on plutonium appear to be an effort to avoid dependence on foreign sources for enrichment of uranium. It must be assumed that Argentina itself will eventually acquire, with or without foreign assistance, the means to reprocess fuel from its power reactors. In the meantime, Argentina has taken the first step toward becoming a nuclear supplier in its own right by signing an agreement to assist Peru in the development of a research reactor.

Net Assessment

Incentives and disincentives seem to be roughly in balance, but with a slight advantage to the latter for the foreseeable future. The availability of the materials and technology necessary to become a nuclear power is onIy a moderate constraint. The most compelling disincentive is that an Argentine decision to proliferate would almost certainly stimulate a similar action by Brazil, which has the capability to become a more formidable nuclear power, i.e., Brazil could "win" any nuclear arms race on the continent. On the other hand, the prospect of being the first nuclear power in South America, and the second in the Western Hemisphere is a tempting one. From an Argentine perspective it would be a source of prestige, strengthening the regime at home and enhancing status abroad. The preeminence of prestige motivations is perhaps the most noteworthy factor in the Argentine case. The Republic faces no credible external threat to its security.

Circumstances That Might Alter the Relationship Between Incentives and Disincentives

There is small likelihood that public opinion in Argentina would oppose the acquisition of nuclear weapons. In any case, the Government is capable of acting contrary to prevailing public sentiment. The political composition of the government will be a much more important factor. For example, the domestic political pendulum might swing back to a civilian and more liberal regime which would militate against nuclear weapons.

The views of Argentina's weaker neighbors are unlikely to be decisive in any decision regarding nuclear explosives. On the other hand, clear evidence of a Brazilian intent to construct nuclear weapons would greatly increase Argentina's incentive to do likewise. It is noteworthy that neither Argentina or Brazil has ratified the NPT or the Treaty of Tlatelolco which established a Latin American nuclear-free zone. But neither country has the practical option of becoming the only nuclear weapons state in South America. Consequently, they must determine whether sufficient benefits would be gained if both possessed nuclear weapons, and if possession would offset the new tensions and costs these weapons might entail. The likely condemnation of any moves toward proliferation by the rest of Latin America, as exemplified by the attitude of Mexico and the widespread endorsement of the Latin American Nuclear Free Zone, is suggestive of one type of cost.

Pakistan

Background

Pakistan is a country of 65 million people living along the valleys and tributaries of the Indus and Jhalum Rivers and on the foothills and slopes of the Himalayas, It is bounded on the South and East by India, the Northeast by

Indian Kashmir, the North by Afghanistan, the West by Iran, and the South by the Arabian Sea. Pakistan is a Federal Republic led by a president who governs through a prime minister and a cabinet based on a bicameral parliament.

Pakistan is a partly industrialized state capable of shipbuilding and similar work. It is largely dependent on foreign sources for machinery, transport equipment, chemicals, electrical equipment, and petroleum, which it must pay for by the export of the products of cottage industries, some minerals, cotton, fish, and rice. The standard of living within the country ranges from that of hill peoples and subsistence farmers, through a small middle class to a tiny upper class of entrepreneurs and industrialists. While Pakistan can sustain itself at a subsistence level, its industrialization depends on the acquisition of capital and materials from abroad.

Internal political circumstances are exceedingly unstable, characterized by numerous divisions and centrifugal tendencies including outright separatist movements (in Baluchistan and Pushtoonistan) supported from abroad.

The separatist movement in Baluchistan is mirrored within the adjacent Iranian province of Baluchestan, while Pakistan's northern boundary with Afghanistan is subject to Afghani pressure. The loss of East Pakistan in the 1971 war with India, the dispute over possession of Kashmir, and the persistent border tensions over the Rann of Kutch are symptomatic of the pervasive hostility in Pakistan-India relations and of Pakistani weakness in the face of its stronger neighbor.

Pakistani armed forces may not be adequate to deal with the numerous border problems and near insurrections in border areas—to say nothing of any renewed conflict with India. Close relations with Iran and Turkey have assisted Pakistan's economic development but have contributed little toward the nation's security.

Pakistan depends on foreign manufacturers and governmental assistance from abroad for its weapons and military equipment. Since the United States ended military aid, China has supplied much of the newer equipment for Pakistan's armed forces. According to press reports, the most recent Chinese assistance has included some submarines and destroyers.[8]

A number of events in recent years have given impetus to serious Pakistani consideration of the nuclear option. India's successful intervention in the civil war in East Pakistan, with the consequent emergence of an independent Bangladesh, demonstrated the weakness of Islamabad's position. Pakistan's ally, China, was unable to intervene because of the Soviet-Indian alliance, while covert efforts by the Nixon Administration to bolster Pakistan proved futile. Public opinion in the United States tended to support the independence of Bangladesh.

The Prime Minister, Mr. Bhutto, has said that he would prefer to rely on conventional weapons for security but that Pakistan would develop a nuclear capability if it could not acquire sufficient conventional arms.[9] India's detonation of a nuclear device, absorption of Sikkim, and flirtation with authoritarianism have not reassured Pakistan about its own security. The general dearth of criticism from the international community (save for that from China) in response to these events has been a further source of uneasiness and has contributed to Pakistan's sense of isolation. The Canadian decision to withhold assistance to Pakistan's nuclear programs under its new nuclear export policy seemed aimed directly at Pakistan, despite (or because of) Canadian assistance to India's nuclear development eventuating in that country's test of a nuclear device.[10] Islamabad has found Ottawa's requirement that shipments of nuclear materials be restricted to countries willing to ratify the NPT or to accept safeguards on their entire nuclear program unacceptable. Pakistan has adhered closely to past agreements with Canada on safeguards attached to the Canadian-supplied nuclear powerplant at Karachi,

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8 See "Intelligence," *Far Eastern Economic Review,* Vol. 94, No. 51, Dec. 17, 1976, p. 5.

9 See "Bhutto Talks of Going Nuclear," *South China Morning Post* (Hong Kong) Dec. 21, 1974, p. 3.

10 See "Canada's Nuclear Export Policy: Statement by Secretary of States for External Affairs in the House of Commons," Dec. 22, 1976, *Information* Canadian Embassy, Dec. 28, 1976.

but has declared it will not "accept totally unreasonable conditions as the price for Canada's continued cooperation."

U.S. attempts to tie the sale to Pakistan of conventional weapons to an agreement not to purchase a French fuel reprocessing plant has generated additional resentment.[11] Pakistan has not, however, given up the contract with France for acquisition of the plant, and Paris had declared it would honor the agreement.[12] Whether the deal will, in fact, be implemented remains to be seen. The Soviet Union's decision to supply India with a 6-year supply of heavy water for its nuclear program merely confirms Pakistan's view that nonproliferation is one-sided on the Indian subcontinent. Pakistan has neither ratified or signed the Non-Proliferation Treaty.

Incentives for the Acquisition of Nuclear Weapons

- A history of tension and warfare with India, culminating in the loss of East Pakistan in 1971, which raises the spectre of further armed conflict in the future.
- The Indian-Soviet defense agreement of 1971, that seems aimed at Pakistan as much as at China.
- The inability of China and the unwillingness of the United States to assist Pakistan in an Indian war, as demonstrated in *1971.*
- The urge to acquire some means of unifying the country, countering the process of political fragmentation, and overawing foreign supporters of domestic tribal separatists.
- The goal of becoming the leader of the Moslem world.

Disincentives to the Acquisition of Nuclear Weapons

- The probable alienation of potential sources of international support and arms.
- The magnitude and cost of the effort to acquire nuclear weapons.
- The prospect that such a program would divert technicians and capital away from the vital task of industralization.
- The possibility that proliferation would make any diplomatic settlement with India impossible.

Technical Capabilities

Pakistan has successfully brought two nuclear power reactors onstream with outside assistance. One of those reactors, at Roopur, was lost to Bangladesh in the war with India in 1971. The second reactor has been onstream since 1971. Before the loss of East Pakistan and the detonation of an Indian nuclear device, the chief motive for development of nuclear energy was to modernize Pakistan by exploiting the most advanced energy technology available where accessible. However, other forms of electrical generation, notably hydroelectric, have proven more fruitful.

Pakistan lacks enrichment, fuel fabrication, and fuel reprocessing facilities. It also lacks significant uranium deposits. There are sufficient technicians and engineers to staff a nuclear weapons effort, although that would be to the detriment of other important programs. The principal shortcoming is the lack of the administrative skill needed to bring together the resources, personnel, and money required to embark on a weapons program independent of outside help. It appears that Pakistan could not expect to produce a nuclear device before the early 1980's, if it is dependent on its yet-to-be-acquired fuel reprocessing plant in order to obtain plutonium.

Net Assessment

The technical capability to acquire nuclear weapons at this time is far less than the incentive to do so. It would be possible, with stringent organization of capital, personnel and administration, to establish a promising program for weapons development. But Pakistan must first obtain a fuel reprocessing

[11] See "Pakistan: Bhutto Bows to Nuclear Pressure," *Far Eastern Economic Review,* Vol. 94, No. 5, Dec. 17, 1976, p. 27.

[12] See "Canada to End Nuclear Power with Taiwan," *Los Angeles Times,* June 19, 1974, p. 2.

facility or otherwise acquire the special nuclear material for weapons. Nevertheless, Pakistan's determination to preserve its security and territorial integrity cannot be ignored as a motivation to overcome what otherwise appear to be important obstacles to the development of nuclear weapons. Consequently, much will depend on Pakistan's perception of the dimension of the Indian threat. The principal disincentive is the cost of a weapons program for Pakistan's economic development effort—both in terms of domestic opportunity costs and possible reductions in foreign assistance.

Circumstances That Might Alter the Relationship Between Incentives and Disincentives

Among the circumstances that could alter the relationship between incentives and disincentives are the following:

- A radical increase or diminution in the perceived threat from India.
- Pressure from Iran and China to forego nuclear weapons development.
- A guarantee by the nuclear powers of the territorial integrity and defense of nonnuclear powers in general, or a guarantee of the security of Pakistan by a nuclear power (preferably the United States).
- The breakup of Pakistan as a national entity (the question becomes moot).

Taiwan

Background

Taiwan is an island with over 16 million inhabitants, governed from Taipei as the Republic of China (ROC). The head of State of the ROC is a president ruling through a premier and cabinet. The principal representative body is the Legislative Yuan, part of whose members hold office for life, the rest being elected. Governmental power may rest in the hands of either the president or the premier, depending on the political and military following of the individuals involved. High government posts are virtually monopolized by the Mainland Chinese minority who fled to the island in the wake of the defeat of the Nationalist regime at the hands of the Communists in 1949.

The ROC still claims to be the legal government of all of China and remains in a formal state of belligerency *vis-a-vis* the People's Republic of China (PRC). The PRC, for its part, lays claim to Taiwan and pledges to "liberate" the island. While the ROC, in the past, has been firmly tied to the United States for defense, this relationship has been greatly weakened with the American failure in Vietnam and with the opening of diplomatic and trade relations between the PRC and the United States.

The ROC'S ground, naval, and air forces are presently adequate to provide a credible deterrent to PRC attack. Over the long term, however, the conventional military balance will probably shift heavily in favor of Peking.

Taiwan is prosperous, with light to medium industry. Its prosperity depends on import-export and entrepot trade, foreign investment in Taiwan, and ROC investment abroad. Outside of Japan, Taiwan enjoys the highest per capita GNP in Asia. Foreign trade excludes any commerce with communist powers, but otherwise extends throughout the world.

The diplomatic emergence of the People's Republic of China, its assumption of U.N. membership in place of the ROC, and the U.S.-Chinese rapprochement have all contributed to the increasing international isolation of the Taipei regime. Those countries courting the People's Republic of China for commercial or diplomatic advantages have shown a willingness to abandon their formal diplomatic relations with Taiwan, although they have tended to maintain their commercial interests in that country.

As a consequence of the above-mentioned factors, Taiwan's long-term security prospects are problematical. Continued erosion of the regime's diplomatic position could lead to increasing international economic pressures. Militarily, ROC forces may be unable to obtain needed assistance from abroad in the event of an attack from the Mainland—although at present the PRC probably lacks

the amphibious capability to launch an effective assault.

Because it is dependent on foreign suppliers, the ROC'S nuclear program is vulnerable to disruption. Withholding nuclear technology and material from the ROC could be a result of suspicion that Taipei is seeking nuclear weapons, but may equally come from an unwillingness to offend China (as was the case when Canada cancel led its nuclear program with Taiwan). However, other countries, less concerned about proliferation or hostile to Mainland China, may see some advantage to assisting Taiwan's nuclear program. A country like South Africa, which possesses the technology and is considered a pariah in the international community anyway, might well see some advantage to cooperation with Taiwan.

Taiwan has ratified the Non-proliferation Treaty. If that ratification was in the interest of maintaining good relations with the United States, weakening of those relations could also weaken Taiwan's commitment to the treaty.

Incentives for the Acquisition of Nuclear Weapons

- Anxiety that at some point the PRC will attempt the conquest of Taiwan by force.
- Concern about the credibility of the U.S. defense commitment to Taiwan.
- Belief that nuclear weapons in the hands of the ROC could be used to deter or defeat a PRC attack.
- Hope that Taiwan's capacity to initiate nuclear war would induce the international community to restrain the PRC from the use of force against Taiwan.
- Belief that the possession of even a token, nuclear force would give the ROC Government greater psychological force and political credibility in its claim to be a legitimate and viable alternative to the present regime in Peking.

Disincentives for the Acquisition of Nuclear Weapons

- Fear that acquiring nuclear weapons would alienate the United States and other powers upon whose goodwill Taiwan depends for security and trade.
- Lack of domestic supplies of uranium and other nuclear materials, rendering Taiwan dependent on foreign sources for development of its nuclear power program.
- Nonproliferation pressures resulting from Taiwan's adherence to the NPT and the imposition of IAEA safeguards.
- The risk that possession of nuclear weapons by Taiwan would expose Taiwan to nuclear attack without a commensurate increase in Taiwan's defense capability.
- The burden of acquiring nuclear weapons and delivery means sufficient to act as a deterrent to PRC attack.

Technical Capabilities

While the ROC is not an advanced industrial nation, it possesses all of the basic technology for the development of nuclear weapons. Although it lacks its own means of producing some of the special materials for a nuclear program, the ROC does possess within its shipbuilding, metallurgical, chemical, and electronic industries the capability to develop those means. Scientific, technical, and engineering personnel are numerous now and increasing in number.

The development of nuclear technology has its impetus from an extensive nuclear research program and the introduction of nuclear energy for the generation of electricity. The latter is a result of the increasing demand for electricity and competing demands between the electric power industry and other industries for the domestic supplies of fossil fuels.

The ROC has already acquired one nuclear power reactor that will come onstream during 1978. It also has a fuel-fabrication facility.

The technical barriers to nuclear proliferation include the lack of a domestic uranium supply and reprocessing facilities. Taiwan is dependent on foreign suppliers for nuclear fuel, fuel reprocessing, uranium enrichment, and reactors. In the light of a strong international reaction to published reports that it was planning to build or was building a plutonium reprocessing plant, Taiwan has pledged not to proceed with such an undertaking.

There is no reason to suppose that Taiwan is less capable of mastering nuclear technology than was the PRC, nor may it be supposed that the administrative organization of the Taiwan government is not equal to the task of developing nuclear weapons.

The ROC intends to have six nuclear power reactors onstream by the mid 1980's. These are boiling water reactors fueled with enriched uranium, not appropriate for the efficient production of plutonium. However, Taiwan does have a Canadian-supplied NRX research reactor, of the same type as that used by India to produce plutonium. It is significant that the Government's principal military ordinance, research, and development facility is colocated with the Institute of Nuclear Energy Research.

Taiwan has a proven capability of separating plutonium from spent fuel on a laboratory scale. A small reprocessing laboratory was constructed in Taiwan but is presently disassembled.

It would appear that Taiwan could have a nuclear device in a relatively short time, if the Government were to abrogate the NPT and repudiate its pledge not to reprocess spent fuel. An alternative, but less likely scenario might see Taiwan follow the Israeli model and create the widespread impression that it possesses nuclear weapons—without overtly confirming it. Already the ROC has publicly claimed the technological capability to produce nuclear weapons while pledging not to implement that capability.

Net Assessment

The pressure on Taiwan from the PRC, and the ROC'S relative diplomatic isolation, render Taipei less sensitive than some other governments to antiproliferation views in the international community. The possibility that nuclear weapons would either ensure the ROC'S continued independence, lend strength to any opportunity to reestablish a Nationalist regime on the Mainland, or facilitate an accommodation with the PRC not unfavorable to the ROC all lend incentive to proliferation.

The ROC has adhered to the nuclear nonproliferation treaty. But the risk of alienating Japan and the United States through proliferation may be balanced by the prospect that ROC nuclear weapons might incline the international community to restrain the PRC from acts against Taiwan that would threaten nuclear war. Adherence to the nonproliferation treaty may, therefore, be contingent on the perceived strength of the U.S. commitment to the defense of Taiwan.

Technological considerations do act as restraints. The principal constraint is the dependence on foreign suppliers for reactor components, uranium, and reprocessing. If there is a concerted effort to deny the ROC such materials and technology, then proliferation will be impeded. Because the United States is both the ROC'S principal nuclear supplier and its only major military ally, Washington has very substantial influence over the future course of Taipei's nuclear policy.

Circumstances That Might Alter the Relationship Between Incentives and Disincentives

Among the circumstances that could alter the relationship between incentives and disincentives are the following:

- A sharp change in the pace and/or direction of the movement toward normalization of relations between Washington and Peking.
- A change to a firm and materially substantial commitment by the United States to the continued independence of the ROC.
- Acquiescence, however indirectly, by the ROC to Mainland control.

The major variable in the situation is the course of U.S.– PRC relations. If the normalization of U.S. relations with Peking evolves in such a way that the ROC feels it cannot depend on any continuing relationship with Washington, the result may be desperation in Taipei and a decision to opt for nuclear weapons.

The other striking feature of this case is the strength of the ROC'S incentive to acquire nuclear weapons. Like Israel and South Korea, the ROC faces a serious, clearly defined, external military threat to its existence. Under the circumstances, nuclear weapons could serve as a deterrent and weapon of last resort, Moreover, several major states with interests in the area, e.g., the U. S. S. R., Japan, and the U. S., might see some benefits resulting from an ROC nuclear weapons capability. For the United States, it might permit the disengagement from any remaining security commitments to Taiwan without precipitating a PRC conquest of the Island. This is not to suggest, however, that any of these states would view a nuclear-armed Taiwan as being, on balance, in their best interest.

CONCLUSION

One approaches with caution any attempt to integrate the diverse factors influencing nuclear proliferation into a global assessment of incentives and disincentives to acquire nuclear weapons. However, a review of the Nth country case studies suggests that the principal incentives influencing nations operating at the threshold are the following.

1. The need to counter perceived local and regional threats.
2. The desire to accrue the political status that seems to accompany a weapon capability.
3. The desire to hedge against political and military uncertainties while increasing the capability to exert regional influence.

The principal disincentives operating on the same countries are the following:

1. Concern about adversary responses, including the stimulation of regional nuclear arms races,
2. Possible alienation of the superpowers and suppliers, principally the United States, with resulting loss of nuclear imports and economic development assistance.
3. Diversion of resources from needed industrial development and social welfare programs.

What particularly stands out is the central role of regional conflicts and contests for influence. An effective policy to inhibit proliferation will have to address the almost universal aspiration for security, influence, and prestige, and the disputes these aspirations engender. It will also have to address means of encouraging a response to proliferation on the part of allies, suppliers, adversaries, and the international community as a whole, which will maximize the costs and penalties associated with proliferation. Specific policy options to achieve these purposes were analyzed in chapter III.