North Korean missiles: strategic implications and policy responses

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Abstract  Analysts remain sharply divided on the underlying motivations behind North Korea's ballistic missile program, more than two years after Pyongyang startled the world by test firing its Taepodong-1 missile in August 1998. In the aftermath of the historic South–North summit meeting in June and US Secretary of State Madeline Albright's path-breaking trip to Pyongyang in October, proponents of the engagement school argue that with a mixture of patience and inducements, North Korea will ultimately negotiate away its missiles. They point to the 1994 Agreed Framework as a key reminder that North Korea uses its weapons of mass destruction capability as a bargaining chip. Conversely, countervailing arguments point out that North Korea's ballistic missile program serves multiple purposes such as shifting the correlation of forces to its favor, supporting the military's modernization goals, and as the primary symbol of military prowess and that, as a result, a negotiated settlement is unlikely. This paper assesses North Korea's potential reasons for pursuing a robust ballistic missile program over the past two decades and the broader strategic consequences of North Korea's missile arsenal, particularly if it succeeds in developing intercontinental ballistic missile capabilities. In addition, it also analyzes South Korea's political and military responses to North Korea's accelerated ballistic missile program including South Korea's own ballistic missile modernization goals. The paper also reviews the problems associated with trilateral policy coordination between South Korea, the United States, and Japan. Finally, policy options are analyzed but none appear to be able to satisfy the seemingly contradictory objectives of the key players in the ongoing North Korean missile saga.

Keywords  North Korean missiles; proliferation; South–North relations; ROK defence; ROK–US relations.
The North Korean missile conundrum

For the second time in less than a decade, elements of North Korea’s weapons of mass destruction (WMD) program have surfaced as a major security challenge. In March 1993, Pyongyang startled the world by threatening to withdraw from the Nuclear Non-Proliferation Treaty (NPT). The tense months of 1993–94 resulted in a series of responses including diplomatic protests, international public pressure, the threat of economic sanctions, and according to some sources, even the contemplation of military options by the United States.\(^1\) Intense and protracted negotiations between the United States and North Korea resulted ultimately in the signing of the October 1994 Agreed Framework. Despite shortcomings in the nuclear accord and delays in implementing follow-on provisions, North Korea’s nuclear weapons program remains frozen, at least for now.

Over the past several years, North Korea has been the focus of yet another security quagmire, this time though, on the basis of its ballistic missile program. Left unchecked, North Korea’s growing ballistic missile capabilities could have significant repercussions for US and South Korean defense plans, long-term strategic stability in Northeast Asia, alliance cohesion, and ongoing confidence-building measures (CBM) such as the four-party talks. Moreover, at a time when several East Asian countries are continuing with selective power projection programs including ballistic and cruise missiles, North Korea’s ballistic missile threat could spur a new and dangerous arms race.\(^2\) In addition, while significant attention has been paid to whether or not North Korea will proceed with another Taepodong missile test, the more important issue is how South Korea and the United States will respond if North Korea actually deploys long-range missiles such as the Taepodong-2 or the Taepodong-3 with intercontinental capabilities.

How the North Korean missile issue will be resolved ultimately remains uncertain although the first-ever inter-Korean Pyongyang summit on June 13–15, 2000, between Kim Dae Jung of the South and Kim Jong II of the North has raised hopes of a diplomatic resolution. On June 21, 2000, North Korea extended its earlier pledge to the United States that it would stop flight-testing its long-range missile so long as talks were under way with the United States.\(^3\) While the ROK and the United States remain optimistic that ongoing talks may result in further assurances from Pyongyang on controlling its long-range missile program, only time will tell whether North Korea will agree to address such related issues as engine testing and improvements in target acquisition systems and launch sites. While the impact of the historic South–North summit with special reference to the ballistic missile issue is discussed in greater detail below, the potential for substantially reduced military tensions on the Korean Peninsula has also colored the ongoing debate on the need for a US national missile defense (NMD) as well as a regional theater missile defense (TMD)
system. At the same time, the summit has generated intense debate within South Korea, and in particular, its national security and defense policy communities, on how to read North Korea’s overall strategic calculus. For instance, immediate post-summit discussions in South Korea have focused on whether North Korea should continue to be perceived as the principal source of threat or whether the South should make a ‘great leap forward’ by a more nuanced and neutral perception of the North.

Notwithstanding prospects for accelerated confidence-building measures between the two Koreas and specific progress on curtailing North Korea’s missile program, it is much too early to predict whether post-summit developments will fundamentally alter the context of the missile debate, including a significant revamping of South Korean and US estimates on North Korea’s missile capabilities. Assessing North Korea’s ballistic missile program from the perspective of South Korea has been generally constrained by three intelligence problems: (1) the lack of primary sources; (2) the dearth of officially sanctioned studies; and (3) the general lack of technical expertise within the security policy. That said, open source intelligence on North Korea’s technical capabilities is not insignificant, and data derived from North Korean missile sales to Pakistan and Iran, for example, provide a good glimpse into key aspects of North Korean missile technologies. But critical questions remain: What are Pyongyang’s central strategic objectives? How will the summit affect US–North Korean talks? How extensively does the Korean People’s Army (KPA) depend on its ballistic missile arsenal? And most important, what lies behind the leadership’s calculations in pursuing a robust ballistic missile program?

Given the closed nature of the North Korean system, fully satisfactory answers will continue to elude South Korea and the United States, despite a symbolic breakthrough through the summit. Nevertheless, North Korea’s ballistic missile program does not function in a total black box and while critical pieces of the overall jigsaw puzzle remain missing, significant circumstantial evidence exists. Thus, this essay seeks to assess North Korea’s ballistic missile program with four major elements: (1) postulating potential motivations behind Pyongyang’s missile programs; (2) postulating mid- to long-term strategic repercussions including potential paths after the June 2000 summit; (3) analyzing South Korean and allied responses (principally the United States); and (4) policy alternatives which could be considered by South Korea and the United States.

**Paying-off Pyongyang: Act Two?**

Based on the contrasting sources of North Korea’s missile programs, inherent difficulties in formulating viable responses, and other extenuating circumstances such as the potential for a North Korean collapse, the North Korean missile threat poses fundamental policy challenges to the three countries that are most affected by it; namely, South Korea, the United
States, and Japan. North Korea has the capability to hit all major targets in South Korea and Japan, and if it successfully develops a longer range missile such as the Taepodong-2, even parts of the United States. In considering future conflict scenarios or major political–military crises on the Korean Peninsula, North Korea’s ballistic missiles must be factored into the equation.

From Pyongyang’s perspective, its missiles provide a strategic buffer against a worsening ‘correlation of forces’ and also as a shield against external pressures such as the cumulative effects of globalization. They also furnish North Korea with diplomatic leverage since strategic ambiguity over North Korea’s WMD assets compel outside powers to negotiate with the North. Ballistic missiles and weapons of mass destruction also serve to prolong the regime. Preserving the world’s first and only communist dynasty requires a Weltanschauung that places primary emphasis on a circle of enemies, reactionaries, and counter-revolutionaries. North Korean missiles partially fulfill this function since they are targeted against ‘hostile’ and ‘splittist’ powers. In essence, Pyongyang has been able to gain key political, economic, and even diplomatic dividends by perpetuating WMD-driven crises, which in turn, enables it to sustain iron-clad rule at home.

South Korea, the United States, and Japan all agree that North Korean missiles pose significant security and military challenges, especially if Pyongyang begins to deploy long-range missiles such as the Taepodong-2 or exports them to third countries. North Korea’s ballistic missiles would be particularly worrisome with biological and chemical weapon warheads. They also share common interests in deterring and preventing the outbreak of a major crisis or war on the Korean Peninsula, especially if North Korea threatens to, or actually uses, ballistic missiles in a major crisis. But coordinating strategies and policies between South Korea, the United States, and Japan have been constrained by four factors: (1) divergent perceptions on the actual threat posed by North Korea’s missiles; (2) contrasting calculations on potential long-term repercussions; (3) different domestic political considerations; and (4) divergent policy priorities.

While the circumstances surrounding the North Korean missile problem and the nuclear crisis of the early 1990s are different, South Korea and the United States initially assumed hard-line postures toward the North at the onset of the nuclear crisis. Seoul and Washington repeatedly warned Pyongyang of ‘grave consequences’ if it went down the nuclear path, and sanctions were about to be implemented through the UN Security Council. In the end, since Seoul and Washington wanted to avert two worst-case scenarios – a nuclear-armed North Korea and the outbreak of conflict on the peninsula – they implemented a ‘freeze,’ or an option which has postponed, but not fundamentally thwarted, North Korea’s nuclear ambitions.

A similar dilemma confronts South Korea and the United States today. Short of North Korea’s voluntary dismantling of its missile arsenal, its
acceptance of a comprehensive package deal with the United States and South Korea – such as swapping its missile program with enhanced security assurances coupled with economic and political incentives – and a mutually verifiable South–North arms control agreement, there is little assurance that North Korea’s missile programs will be frozen, much less dismantled.

To be sure, diplomatic efforts continue. For example, on September 12, 1999, North Korea agreed to temporarily suspend long-range missile tests in exchange for a commitment from Washington and Tokyo to provide Pyongyang with additional economic assistance. From May 24–28, 2000, US and North Korean officials met in Rome to talk about progress on the Agreed Framework and other ‘issues of mutual concern’ such as ballistic missiles. As noted above, Pyongyang announced in late June that it would continue to suspend long-range missile tests so long as negotiations continue with the United States. Most significantly, the June summit has raised hopes in Seoul and Washington that North Korea’s flight-testing moratorium can be expanded into a comprehensive resolution of the missile quagmire.

Nevertheless, although intense negotiations will continue, prospects for a fundamental resolution remain slim given that North Korean missiles serve various functions, including regime survival. At the other extreme, South Korea or the United States could seriously contemplate military options such as a pre-emptive strike if future negotiations ultimately fail. But chances are close to zero that Seoul or Washington would initiate a surgical strike without an explicit North Korean attack. Ultimately, given the political and military costs of coercive strategies, chances are greater than even that South Korea and the United States – despite assurances to the contrary – will eventually decide to pay-off North Korea. If so, such a move will not only deal a major blow to existing non-proliferation regimes, it will also erode the credibility of ROK–US deterrence and defense on the Korean Peninsula.

The North Korean missile Pandora’s box

Despite rising concern in the summer of 1999 that North Korea was on the verge of a second Taepodong test, the Clinton administration stated in August 1999 that another test might not occur ‘imminently’. So long as bilateral talks continue between Washington and Pyongyang, and in so far as North Korea benefits from proceeding on the negotiation path, North Korea is unlikely to launch another test. Nevertheless, even if North Korea proceeds with another Taepodong test, South Korea, the United States, and Japan are unlikely to adopt more coercive policies. At a minimum, the three parties will enact partial economic sanctions, mount vigorous diplomatic protests, and freeze high-level talks. In July 1999, the Obuchi Cabinet introduced a bill in the Diet (the Japanese parliament)
which was eventually passed into law, that allows the government to freeze the flow of money and goods – estimated at $650 million to $1 billion a year – to the North by pro-Pyongyang Korean residents in Japan. But even in the case of another long-range missile test, none of the three countries are likely to implement response policies other than limited economic and diplomatic sanctions. Equally significant, South Korea and the United States have ruled out any use of force to dissuade North Korea from undertaking a second Taepodong test.

For Washington, the North Korean missile problem has proved to be even more vexing since it has to also take into consideration South Korea’s overall response strategies and the fallout from pursuing a regional TMD system. In response to North Korea’s accelerated missile programs, South Korea has insisted that it should be able to develop medium-range missiles with the capability to hit most targets in North Korea. Although the United States agrees, in principle, to South Korea’s proposal that it should have the leeway to develop its own missile arsenal with a range up to 300 km, Washington is concerned that such a move could fuel a new arms race in the region. Thus, the North Korean missile program brings to the surface an equally important issue, namely, South Korea’s desire to attain a more robust and independent defense posture even as it continues to receive critical military support from the United States.

Based on a 1979 and a follow-on 1990 bilateral missile memorandum which Seoul signed with the United States, South Korea is constrained from developing ballistic missiles with a range beyond 180 km. In the face of North Korea’s growing missile threat, however, South Korea began talks with the United States in the mid-1990s to renegotiate the 1990 agreement so that it can develop missiles that can target most of North Korea, or up to 300 km. (The 1990 diplomatic note actually expired at the end of 1999 but until a follow-on agreement can be reached, Seoul and Washington have agreed to abide by the provisions of the earlier memo.) Seoul considers missile modernization as a key defense priority. Indeed, South Korea feels that development of missiles up to 500 km is necessary not only as a counter-deployment measure, but also in terms of enhancing its overall air defense capabilities.

North Korea’s missile threat has also spurred Japan’s participation in a US-led regional TMD system. Defense Secretary William Cohen and Minister of State and Director General of the Self Defense Agency Hosei Norota agreed in July 1999 to sign a memorandum of understanding to jointly develop a ballistic missile defense system so that incoming missiles can be destroyed before they hit Japanese territory. At the same time, China, Russia, and North Korea have all attacked any Northeast Asian TMD concept as a blatant attempt by the United States to assert its ‘military hegemony’ in the region. Beijing opposes a regional TMD system since it argues that it has inherent offensive and defensive capabilities. Moreover, if a regional TMD system covers Taiwan, China has argued
that such a move would be tantamount to a ‘final straw’ which could lead to serious consequences.\textsuperscript{15} Chinese opposition to a potential Northeast Asian TMD system has intensified since 1999, particularly in the aftermath of Taiwanese President Chen Shui-bien’s election on March 18, 2000. As a case in point, Beijing denounced the statement made by Taiwan’s new Minister of Defense Wu Shih-wen on May 29 when he stated that Taiwan would do its utmost to establish an anti-missile defense system in response to China’s nuclear-capable Dongfeng-11 and Dongfeng-15 missiles.\textsuperscript{16}

China stipulates that if Taiwan joins a TMD umbrella, it would give pro-independence advocates a ‘false sense of security’ that could propel Taiwanese independence. While Japan has proceeded cautiously on the TMD issue and continues to assure China that any participation in a TMD program would be entirely defensive and not directed against China, Beijing has argued that Japanese participation in TMD is a precursor to a more militarily aggressive Japan. For its part, South Korea has chosen not to participate in a TMD study for technological and cost reasons.\textsuperscript{17}

North Korea’s missile problem has opened a new security Pandora’s box in Northeast Asia that defies conventional security planning. Moreover, Pyongyang’s ballistic missile threat adds a dangerous dimension to a potentially volatile process, namely, the possibility of a North Korean collapse. If the North Korean regime collapses through a combination of irreversible economic decline, dissent within the ruling Korean Workers’ Party (KWP), or even a military coup, management of North Korea’s WMD assets, including its missile inventories, will surface as a critical security task for South Korea and the United States. For these reasons, it is critical to keep in mind that paying-off North Korea to ‘freeze’ its ballistic missiles may ultimately backfire with potentially devastating consequences.

On August 31, 1998, North Korea launched what was believed to be a Taepodong-1 ballistic missile over Japan with a range of over 2,000 km. Pyongyang insisted that its payload was a satellite – the \textit{Kwangmyungsung} – although it failed to be placed in orbit. As a sovereign state, North Korea has not broken any international law or convention by developing or even testing long-range missiles.

Nevertheless, the fact that North Korea was able to successfully test-fire a two-stage intermediate-range ballistic missile (IRBM) over Japan and possibly even within reach of Alaska, has never been a legal issue. Rather, it is that the remaining Stalinist state in the world, with the fifth largest standing army, and one that came perilously close to developing nuclear weapons, has the capability to launch ballistic missiles against all of its principal adversaries. But the so-called ‘mad man’ theory does not apply to North Korea’s pursuit of missile capabilities since it has remained at the core of Pyongyang’s military strategy dating back to the early 1970s. Begun under the direction of Kim Il Sung and accelerated by Kim Jong
Il, Pyongyang’s WMD program, including ballistic missiles, lies at the very heart of North Korea’s strategic goal of acquiring an ‘arsenal of arsenals.’ Since the early 1990s, the United States and South Korea have monitored mounting evidence on North Korea’s long-range missile program. Nonetheless, prior to the August 1998 launch, many believed that it would be at least five years down the road before North Korea was able to successfully launch a two-staged IRBM. Since the first Taepodong launch, the main concern has been focused on another Taepodong test, perhaps even the Taepodong-2 with a range of 4,000 km. In a joint foreign ministers’ statement issued on July 27, 1999, US Secretary of State Madeleine Albright, South Korean Foreign Minister Hong Soon Young, and Japanese Foreign Minister Masahiko Komura appealed to Pyongyang to accept engagement rather than risk ‘serious negative consequences’ in the event of a long-range missile test. A few days later, US Defense Secretary William Cohen and South Korean Defense Minister Cho Song-Tae also warned North Korea of ‘serious consequences’ in the event of a second test. (Initially, Cohen did not rule out military action but subsequent announcements from senior US and South Korean officials stated that military options were not being considered.)

Although another Taepodong test would have significant repercussions, the more salient issue is trying to understand the key motivations behind Pyongyang’s missile ambitions. To begin with, despite a worsening economic crisis symbolized by nine consecutive years of contraction, a virtual breakdown in the rations system, and a famine that may have claimed up to 2 million lives, North Korea continues to spend approximately 25 per cent of its GDP on defense. While recent data suggest that the North Korean economy may be slightly on the mend with an outside possibility of marked improvement by 2002, the fact remains that the North Korean economy has suffered serious structural damage. More important, North Korea shows no signs of curtailing its ballistic missile program despite outstanding economic difficulties.

According to testimony presented in the US Senate Armed Services Committee on March 7, 2000, General Thomas Schwartz, the Commander-in-Chief of the United Nations Command/Combined Forces Command stated, in part, that ‘the progress of the North’s ballistic missile program indicates it remains a top priority. Their ballistic missile inventory now includes over 500 Scuds of various types.’ He also testified that North Korea is continuing work on the 5,000 km range Taepodong-2 and surmised that ‘in the last 12 months, North Korea has done more to arrest a decline in readiness and to improve its military capability than in the last five years combined’ (emphasis added). Therefore, assuming that Pyongyang is going to continue to invest scarce resources into its WMD and ballistic missile programs, two key questions arise: first, key compelling factors behind North Korea’s decision to accelerate ballistic missile capabilities; and second, the role of ballistic missiles and WMD in North Korea’s strategic calculations.
The clash between the ‘engagement’ and the ‘traditionalist’ schools

While a fairly broad consensus traditionally existed in South Korea, the United States, and Japan on the threat emanating from the North, contending perceptions on the acuteness of the North Korean military threat began to shift from the early 1990s. Ironically, as the North Korean nuclear crisis erupted in March 1998, some analysts argued that North Korea’s nuclear ambitions should be seen as a defensive reaction to a worsening strategic environment rather than as an acute and irreversible security threat. North Korea’s sharp economic downturn throughout the 1990s also resulted in a re-examination of the KPA’s military capabilities. That said, most analysts continued to point out that North Korea posed a serious security challenge, if not a credible threat, to South Korea and other regional powers such as Japan. In the aftermath of the June summit, however, Seoul has been put in a quandary. On the one hand, it does not want to portray North Korea negatively which could damage prospects for a second summit or progress on other CBM fronts. At the same time, it cannot afford to significantly downgrade its security perception of North Korea in the absence of any fundamental change in North Korea’s military strategy and the potential for strategic discord with the United States.\textsuperscript{24} The summit has complicated an already complex equation; namely, reaching a consensus on the primary strategic motivations behind North Korea’s ballistic missile program.

After the end of the Cold War, North Korea’s accelerated economic decline and the rise to power of Kim Jong II following Kim Il Sung’s death in 1994, two basic schools of thought have emerged on assessing North Korea’s strategic motivations.

The ‘engagement school’ argues that notwithstanding the Stalinist nature of the system, North Korea’s strategic calculus is driven primarily by a series of defensive impulses and that from an overall perspective, North Korea’s military might is no longer a formidable threat.\textsuperscript{25} In contrast, the ‘traditionalist school’ stipulates that despite some tactical shifts, North Korea’s fundamental strategic goals and modus operandi remain unchanged. Indeed, traditionalists maintain that prospects for instability on the peninsula have increased due to a combination of economic decline, WMD programs, and dimming prospects for a viable exit strategy. The debate between these two schools has intensified since Kim Dae Jung assumed the presidency in February 1998. In particular, Kim’s comprehensive engagement toward the North – also referred to as the ‘sunshine policy’ – has generated substantial support as well as rancor within South Korea. Moreover, given the highly politically charged nature of the North Korean security debate in South Korea, the debate is going to intensify following the inter-Korean summit.

If inter-Korean détente flourishes, one could imagine a Korean version of the West German security debate in the early to mid-1980s when
governments led by Helmut Kohl had to grapple with NATO’s counter-deployment and missile modernization in response to the Soviet deployment of the SS-20s in Eastern Europe. Although the circumstances are different, the ruling Millennium Democratic Party (MNP) in South Korea has already pointed out that ‘Cold War thinking’ has to be overcome in the South in order to expedite progress in inter-Korean talks. Key ruling party officials have argued that South Korea should revamp its National Security Law and to desist from picturing the North as a perennial security threat. For its part, the opposition Grand National Party (GNP) has maintained that any revision of the National Security Law or any change in the status of the US forces in South Korea can only be considered after substantial change in North Korea’s forward-deployed forces along the DMZ and significant progress in addressing North Korea’s WMD problem.\(^26\)

The main point here is not to emphasize one school over the other; rather, it is to illustrate the sheer complexity of crafting a viable policy option that combines elements of the two schools. Far more important than the pros and cons of sunshine policy is whether North Korea will ultimately join the engagement bandwagon.\(^27\) In order for engagement to produce tangible results, however, the ultimate test lies deep within the leadership in Pyongyang. If North Korea accepts the package deal crafted by Seoul, Washington, and Tokyo – significant forward movement on WMD and missile proliferation in exchange for wide-ranging security assurance – engagement’s primary objective of fostering a gradually less threatening North Korea will be achieved.

The June summit provided a crucial boost to the engagement school given that the Kim Dae Jung government’s sunshine policy was criticized by the opposition and the conservative defense policy community as being too conciliatory to the North without adequate concessions by Pyongyang. That said, many have also responded that while North Korea cannot rapidly embrace reform and openness owing to domestic political constraints, the summit has illustrated North Korea’s willingness to begin the initial step toward greater economic cooperation.\(^28\) As a case in point, South Korean Minister of Tourism and Sports Park Ji Won (one of the chief negotiators leading up to the summit) noted even before the Pyongyang meeting that ‘there has been a complete change in North Korea’s attitude and the North is proceeding along a pragmatic path.’\(^29\) For his part, President Kim Dae Jung stated on March 11, 2000, during a visit to Berlin that South Korea was prepared to begin economic cooperation with North Korea at the governmental level. Kim also emphasized that Seoul was ready to assist the North in a comprehensive social infrastructure modernization scheme.\(^30\)

Notwithstanding the potential for accelerated South–North economic cooperation, however, many have also noted that North Korea is unlikely to adopt reforms based on three principal reasons. First, even if North
Korea moved toward a market economy, there is no assurance that such a transition could be achieved without significant political, economic, and social turmoil. Second, assuming that wide-ranging economic reforms are implemented, it will take a long time before tangible results are produced. And third, such a move will deal a blow to Juche (self-reliance), and in the process, undermine North Korea’s raison d’être. One of the leading proponents of the traditionalist school recently argued that:

What course North Korea chooses in the afterglow of its unprecedented summit still remains to be seen. Western policy makers are praying that the summit portends a North Korean version of pere-stroika – with ‘new thinking’ toward its old foes. North Korean authorities, however, have always been unsparing in their criticism of Mikhail Gorbachev, whose policies they blame for precipitating the downfall of the Soviet system.

For Kim Jong Il, the central dilemma is that if he undertakes significant economic reforms, he can do so only by denigrating the tenets of Juche but he cannot afford to do so since his very political legitimacy stems from Juche which has laid out the ‘historical inevitability’ of his succession. North Korea’s official pronouncements on South Korea’s sunshine policy have been uniformly negative since Pyongyang has maintained that the sunshine policy seeks ultimately to destabilize the North. Just a few days after the North agreed to hold the second round of vice-ministers’ talks in Beijing in June 1999, the official party newspaper – the Nodong Shinmun – reported that the ‘South Korean authorities should change themselves before they attempt to change others’ and that ‘only death awaits those who attempt to struggle with fellow Koreans through the reliance on foreign powers under the banner of international cooperation.’ (Since the summit, North Korea has toned down its propaganda attacks on the South but the party continues to maintain its animosity toward Seoul’s sunshine policy which it perceives as a Trojan horse to ultimately destabilize North Korea.)

If one chooses to perceive developments in North Korea through the sunshine policy prism, North Korea’s WMD ambitions should not necessarily warrant critical concern. Proponents of sunshine policy have argued that patience will result in tangible results since North Korea’s primary strategic calculus is being driven by essentially defensive impulses. Seen from the perspective of the engagement policy, North Korea’s primary motivation for developing a range of ballistic missiles such as the Nodong-1/2 and the longer range Taepodong-1/2 are principally threefold: (1) as a bargaining chip to secure political, security, and economic incentives from South Korea and the United States; (2) to earn much needed foreign currency through missile exports; and (3) to offset North Korea’s own vulnerabilities in the face of robust ROK-US deterrence and defense capabilities.
To be sure, supporters of engagement have argued that despite the threat posed by North Korea’s WMD, it is critical to bear in mind that Pyongyang’s nuclear weapons program has been frozen since 1994 under the US–North Korea Agreed Framework. In addition, notwithstanding the challenge posed by the test-firing of the Taepodong-1 missile in August 1998, proponents of engagement have maintained that North Korea’s promise not to test-fire another Taepodong so long as US–North Korean talks continue is a major step forward. Indeed, some analysts have suggested that the August 1998 launch should not be seen as a major military threat. Leon Sigal, for example, has noted that North Korea has shown that it is willing to bargain away its missiles for a price such as the lifting of economic sanctions by the United States. Moreover, he writes that:

North Korea’s launch of a new missile has set off alarms in Japan. The alarm is warranted insofar as the new missile, called the Taepodong-1 by US intelligence, is capable of reaching Japan. Yet the launch was more likely an unsuccessful attempt to mark Kim Jong Il’s formal accession to power by boosting a small satellite into space than a brazen act of intimidation aimed at Japan. Over reaction to the test will impede diplomacy, which is the most promising way to curb Pyongyang’s missile program [emphasis added].

If North Korea’s principal objective behind its WMD program including its ballistic missile component is to ultimately negotiate them away at an acceptable price, North Korea’s WMD assets should not pose any fundamental security concern to the ROK, Japan, or the United States. If so, the viable and logical choice for South Korea and the United States is to pursue a strategy of sustained negotiations including the provision of appropriate security guarantees, including a potential change in the status of US forces in South Korea. Within the spectrum of negotiations, one could even conceive of a gradual reduction of US forces stationed in South Korea given that North Korea continues to perceive the presence of 37,000 US troops as the principal security threat. So long as South Korea and the United States believe that North Korea’s principal motivation lies in acquiring a better deal through its WMD and ballistic missile arsenal, there is every incentive on the part of Washington and Seoul to continue to pursue the negotiation path.

Nevertheless, neither the United States nor South Korea are willing to entertain any discussion of the US forces issue in the context of the ongoing US–North Korean ballistic missile talks. Seoul and Washington have repeatedly affirmed that the US forces maintain deterrence on the peninsula but that they also play a stabilizing role in Northeast Asia. More important, neither side is considering any change in the status of US forces unless and until there is a drastic reduction of threat on the peninsula.
When queried why US forces are needed on the peninsula beyond the North Korean threat, US Secretary of State Madeleine Albright replied, in part, that the United States had treaty obligations with Korea as well as Japan and that ‘we [the United States] don’t put a time limit on our responsibilities or on pursuing our national interest.’

But the perception that North Korea’s principal objective in pursuing a robust WMD program including ballistic missiles is to negotiate them away in exchange for political and economic concessions places far too much emphasis on the bargaining attribute of North Korea’s missile program. Indeed, while North Korea has shown flexibility over the nuclear and ballistic missile issues by agreeing to the 1994 Agreed Framework and extending the moratorium on long-range missile tests, it should be borne in mind that it was North Korea which precipitated the missile crisis in the first place. Thus, the perpetuation of crises followed by parallel ‘compromises’ cannot be construed as fundamental improvements in North Korea’s strategic behavior. More important, there is little reason to believe ‘that the North Korean state would ever voluntarily abandon its quest for nuclear weaponry under any circumstances.’

**Evolutions in North Korea’s military strategy**

Perhaps the most important question in trying to understand North Korea’s missile problem is, quite simply, why North Korea embarked on a comprehensive WMD program in the first place. To be sure, the end of the Cold War, worsening economic conditions, and South Korea’s accelerated economic growth were major factors which may have contributed to North Korea’s sense of siege. In this respect, North Korea’s WMD programs could be perceived as essentially defensive reactions to an increasingly hostile external environment. And viewed from such a perspective, the key value for North Korea’s WMD assets is to buy time and to enhance its negotiating leverage in order for the regime to introduce economic reforms at its pace, and not under external pressure. Within the spectrum of possibilities, such notions cannot be discounted, but it is highly improbable based on numerous countervailing evidence.

Historically, the US air campaign against the North during the Korean War convinced Kim II Sung on the necessity of developing comprehensive strategic capabilities, including ballistic missiles and weapons of mass destruction although North Korea’s preliminary nuclear weapons program probably did not begin in earnest until the latter part of the 1960s or the early 1970s. By the early 1960s, however, North Korea began to revamp its military strategy through the enunciation of the so-called ‘Four Great Military Lines’ doctrine, including: (1) arming of the entire people; (2) fortification of the entire country; (3) the creation of cadres throughout the People’s Armed Forces; and (4) modernization of weapons systems.
Throughout the 1960s, Kim Il Sung tried to emulate North Vietnam’s politico-military strategy towards South Vietnam by stressing destabilizing operations against the South and to exploit fully the opportunities tendered by potential US force reductions in the South. Nonetheless, inciting an indigenous ‘people’s revolution’ in the South ultimately failed, and despite the withdrawal of the US 7th Infantry Division from the ROK in 1971, the United States continued to retain its security commitment to the South.

As the ROK armed forces began to modernize in earnest in the 1970s and 1980s through the Yulgok Program, North Korea’s strategic calculus began to change. By the mid-1980s, coincident with worsening economic conditions, South Korea’s growing economic strength, robust ROK–US relations, and sustained ROK force modernization, North Korea began to accelerate work on its nuclear, biological, and chemical weapons programs. From the standpoint of grand strategy, Pyongyang’s capability to unify the peninsula by force became increasingly untenable as a viable military option. As one defense study reported in 1998, ‘the combination of South Korean strength and US support means that Pyongyang cannot reunify the peninsula on its own terms militarily.’

Many have also argued that while North Korea’s ballistic missile and other WMD capabilities should not be ignored, neither should South Korea overestimate the intrinsic military repercussions of North Korea’s WMD assets. For instance, after the successful launching of the Taepodong-1 in August 1998, some analysts asserted that the primary objective of North Korea’s missile launch was to celebrate Kim Jong Il’s rise as Chairman of the National Defense Committee and that, at any rate, the range of the missile indicated that Japan, rather than South Korea, was the principal target. Although it remains unknown whether North Korea will actually employ its WMD arsenal in actual warfare, the fact that South Korea has to take into serious consideration the WMD factor in current and future defense planning scenarios already provides the North with a built-in strategic edge.

North Korea’s WMD capabilities, in particular its ballistic missiles, could severely constrain US reinforcement efforts. If North Korea threatens to target US bases in Japan or airfields and harbors in Japan, it could severely retard or impede personnel and material reinforcements into South Korea. Additionally, if North Korea launches a ballistic missile attack on South Korean airfields and harbors, it could seriously impede Flexible Deterrence Options (FDO) operations by US forces. The argument has been made that even if the North uses ballistic missiles, the accuracy or circular error probable (CEP) of the Rodong-1 (about 1 km) is such that it would not be able to undertake surgical air strike missions.

It should be noted, however, the fact that North Korea’s ballistic missiles may have limited accuracy is not a critical one. Even if a limited number
of Scud C or Nodong-1/2 missiles are launched on Seoul, other key cities, and industrial cites, there would be immediate psychological and economic consequences in the South. Given South Korea’s total dependence on foreign sources for oil and natural gas and the critical importance of commercial shipping, a North Korean threat to attack incoming merchant vessels could have significant repercussions. Finally, any use of WMD by the North will place immediate pressure on the Korean and American National Command Authorities (NCA) to respond in-kind with the very real likelihood of escalation, including the potential release of nuclear weapons by the North assuming that North Korea has a limited number of operational nuclear warheads despite the nuclear freeze that has been in place since 1994.42

For North Korea, reliance on the former Soviet Union and China for advanced military technologies and weapons systems was a double-edged sword. While Pyongyang had no choice but to rely on military support from its two major patrons, Kim Il Sung always believed that comprehensive self-reliance (Juche) should also be applied to the military sector. Although North Korea is believed to have acquired the services of a number of Russian technicians following the dissolution of the Soviet Union, by and large, self-reliance has been a driving factor behind North Korea’s military modernization strategy. In addition, lessons from the Gulf War were also not ignored by North Korea. As Desert Storm aptly demonstrated, modern warfare could no longer be conducted primarily on the basis of conventional forces. But in order for the North to reap the benefits of RMA technologies, it would have no choice but to divert critical resources to RMA research and development. However, North Korea does not have the technological nor financial capabilities to develop core RMA systems and has therefore opted for the next best alternative: acquiring nuclear, biological, and chemical (NBC) weapons and associated delivery systems.

Thus, North Korea’s WMD programs serve a range of core security objectives. Using WMD to boost regime survival is an important facet of North Korea’s overall WMD program but it is only one of several factors. Indeed, one could argue that if North Korea’s primary motivation for pursuing an aggressive WMD program lies in enhancing regime survival and strengthening its diplomatic bargaining chip vis-à-vis the ROK, the United States, and even Japan, a far better way to secure cooperation is to enact much needed economic reforms. To the contrary, even in the midst of pronounced economic downturn, ‘Pyongyang continues to invest scarce resources in developing and maintaining its military forces, including its chemical and biological warfare and missile programs.”43 Equally noteworthy is whether the KPA truly subscribes to the notion that North Korea’s WMD should be used primarily as negotiating tools or as key components of its defense arsenal.
**Pyongyang’s response to the revolution in military affairs**

For two decades, North Korea has emphasized the development and sale of ballistic missiles and in that period, North Korea has managed to successfully develop, test, and partially deploy medium- and long-range missiles. North Korea’s pilot missile program began when it became involved in a Chinese effort to develop the Dongfeng 61, a 600 km range ballistic missile in the mid-1970s. However, while this program was ultimately aborted, North Korea continued to actively pursue Scud B technology to create a basis for its own in-house ballistic missile program. In 1981 North Korea received a small number of Scud Bs from Egypt and eventually succeeded in reverse engineering the system and first flight-tested the Scud Mod A (a copy of the Scud B) in 1984.

As the August 1998 Taepodong-1 test launch illustrated, North Korea has attained significant know-how. ‘That launch demonstrated some important aspects of ICBM development, most notably multiple-stage separation. While the [US] intelligence community expected a TD-1 launch for some time, *it did not anticipate* that the missile would have a third stage or that it would be used to attempt to place a satellite in orbit [emphasis added].’ To be sure, the North still faces problems with the third stage so that it will take time before it is able to develop ICBM capability (over 5,500 km) but the test amply showed North Korea’s inherent long-range ballistic missile capability.

The fact that North Korea has been working on long-range missiles is not a recent or surprising development. According to testimony given by two former North Korea officials, ‘if war breaks out on the Korean peninsula, the North’s main target will be US forces based in the South and in Japan’ and that Kim Il Sung ordered a crash missile program as early as 1965 to develop missiles that could ‘fly as far as Japan.’ The two North Korean defectors were former KPA colonel Choi Joo-hwal and former diplomat Ko Young-hwan. In testimony before a Senate Subcommittee, they testified that precision strike capability was not the main objective since North Korean missiles have been built to impact on a given target range such as US bases in South Korea or Japan.

Choi testified that the KWP Central Committee oversees the Second Economic Committee which has eight General Bureaus to produce rockets and chemical weapons. Neither Ko nor Choi gave precise deployment figures. In addition, Ko stated that North Korea’s missile exports are handled by the Yangak-san Trading Company, the Changkwang Trading Company under the 2nd Economic Committee, the 15th Bureau in the Ministry of the People’s Armed Forces (MPAF), and the Maebong General Bureau (the Maebong Trading Company) in the General Staff of the KPA. All told, an official at the Maebong General Bureau reportedly told Ko that North Korea earned about US$1 billion annually from missile exports to Syria, Egypt, Libya, and Iran. Ko also testified that North Korea also
Table 1 North Korean NBC weapons and missile programs

I. **Nuclear**
Signed Agreed Framework in 1994 freezing nuclear material production. Prior to agreement, produced enough plutonium for at least one nuclear weapon.

II. **Chemical**
Produces and is capable of using a variety of agents and delivery means, which could be employed against US or allied forces. Not signed the CWC.

III. **Biological**
Pursued biological warfare R&D for many years and possesses biotechnical infrastructure capable of supporting limited biological war. Ratified the Biological and Toxin Weapons Convention.

IV. **Ballistic Missiles**
Produces and is capable of using Scud B and Scud C missiles. Developing the Nodong missile (approximately 1,000 km), Taepodong-1 (more than 1,500 km) and the Taepodong-2 (between 4,000 and 6,000 km). Not a member of the MTCR.

**Other means of delivery**
Land- and sea-based anti-ship cruise missiles; none have NBC warheads. Aircraft and ground systems (artillery, rocket launchers, mortars, and sprayers).


Table 2 North Korean missile characteristics

<table>
<thead>
<tr>
<th>Name</th>
<th>Maximum range (km)</th>
<th>Warhead (kg)</th>
<th>Stages, length (m), and weight (tons)</th>
<th>Initial Operational Capability (IOC)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SRBM</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA-2/HQ-2 SSM</td>
<td>150–200</td>
<td>190</td>
<td>2/10.7 m/2.28 t</td>
<td>1976</td>
</tr>
<tr>
<td>DF-61</td>
<td>600</td>
<td>1,000</td>
<td>1/9.0 m/6.0 t</td>
<td>n.a.</td>
</tr>
<tr>
<td>Scud B</td>
<td>300</td>
<td>1,000</td>
<td>1/11.16 m/5.86 t</td>
<td>1981</td>
</tr>
<tr>
<td>Scud B (modified)</td>
<td>320–340</td>
<td>1,000</td>
<td>1/11.16 m/5.86 t</td>
<td>1985</td>
</tr>
<tr>
<td>Scud C (modified)</td>
<td>500</td>
<td>770</td>
<td>1/11.3 m/5.93 t</td>
<td>1989</td>
</tr>
<tr>
<td><strong>MRBM</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nodong-1</td>
<td>1,350</td>
<td>1,200</td>
<td>1/17.4 m/16.25 t</td>
<td>1997</td>
</tr>
<tr>
<td><strong>IRBM</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taepodong-1</td>
<td>1,500–2,200</td>
<td>700–1,000</td>
<td>2/27.3 m/20.4 t</td>
<td>1998</td>
</tr>
<tr>
<td><strong>ICBM</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taepodong SLV</td>
<td>4,000</td>
<td>50–100</td>
<td>3/27.9 m/19.9 t</td>
<td>1998</td>
</tr>
<tr>
<td>Taepodong-2</td>
<td>4,000–6,000</td>
<td>700–1,000</td>
<td>2/35.4 m/69.4 t</td>
<td>2000 (estimate)</td>
</tr>
<tr>
<td>Taepodong-3</td>
<td>6,000+</td>
<td>100–500 (estimate)</td>
<td>3 (estimate)</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

exports Chinese missiles such as the Silkworm anti-ship cruise missiles (ASCMs) as middlemen with ‘enormous’ commissions. In June 1998, just two months short of the August Taepodong-1 test, North Korea announced that it would continue to develop, test, and export ballistic missiles. This was the first time that North Korea officially acknowledged missile exports to the Middle East. The official North Korean press agency, KCNA, reported that ‘if the United States really wants to prevent our missile export, it should lift the economic embargo as early as possible and make a compensation for the losses to be caused by discontinued missile export.’

Seoul’s two-track approach

The August 1998 test launch of the Taepodong-1 created widespread concern in Seoul, Washington, and Tokyo although Japan’s initial reaction was much sharper than South Korea’s. Japan was outraged that a part of the missile flew over Japanese territory and immediately took retaliatory steps. Tokyo halted food and other aid to North Korea and also decided to suspend normalization talks although the North had already broken them off. Japan’s Self-Defense Forces went on alert and Maritime Self-Defense Force vessels and P3-C patrol aircraft were dispatched for reconnaissance and intelligence collection. Prime Minister Keizo Obuchi stated that ‘the missile launching concerns not only the security of Japan but also the whole of Asia.’ While North Korea announced a few days after the missile test that it was a satellite, and subsequent analysis by US analysts indicated that a satellite was probably launched but failed to orbit successfully, it nevertheless revealed North Korea’s significant progress in the development of long-range missiles.

The Kim Dae Jung government also expressed outrage and shock, but other than diplomatic statements Seoul’s response was muted. Then Minister of Defense Chun Yong Taek stated that, ‘we will respond forcefully through the cooperative efforts of the ROK, the United States and Japan’ and that the national security council would review other steps. Nonetheless, the government was extremely concerned – in certain respects, more than the actual test-fire – that the August launch could derail South Korea’s sunshine policy. Then, as today, the South Korean government continues to attach the highest priority on sustaining the sunshine policy. In addition, proponents of sunshine policy maintain that the primary reason behind North Korea’s missile program is to essentially negotiate it away at a price based on three points: (1) North Korea has been engaged with the United States to discuss curtailing its program in return for some type of compensation; (2) North Korea was engaged in similar negotiations with Israel in 1992–94 and almost reached a deal but US pressure on Israel scuttled the deal; and (3) as the Agreed Framework of 1994 demonstrates, North Korea is able to negotiate a major WMD program.
Such an assessment, however, does not take into serious consideration the underlying strategic motivations behind North Korea’s missile program. If North Korea was principally interested in negotiating away its missiles, it is very doubtful whether North Korea would have begun work on its missile program from the 1970s. Clearly, objectives may change under different circumstances. In previous US–North Korea missile talks, Pyongyang has demanded a total of $3 billion over three years to compensate for its export sales to the Middle East. Officials estimate that North Korea’s missile sales may have generated significant earnings in the late 1980s to the early 1990s but that it has dropped to about $100 million since 1996–97. Over the course of four US–North Korean missile talks (a fifth round is scheduled to begin shortly), some progress has been made such as the extension of the North Korean pledge not to test-fire a long-range missile so long as talks proceed with the United States.

The South Korean government continues to hope that North Korea will ultimately accept a comprehensive package proposal that has been transmitted to the North through former Secretary of Defense William Perry. One cannot discount such a possibility but in all likelihood Pyongyang is unlikely to accept a package deal. Why? Because its WMD and ballistic missile programs offer North Korea the best opportunity to buy time in order for the regime to consolidate its hold on power, to receive additional foreign aid, and to prevent further deterioration in the overall ‘correlation of forces’ between the South and the North. Or as a US think-tank report noted in 1998:

North Korea may be prolonging attempts at negotiation more out of a desire to stall for time to build an intercontinental ballistic missile (ICBM) and related warhead capability than out of a desire to negotiate a ‘soft landing’ with the United States and others. Rather than chips to be bargained away in return for improved relations with Washington, North Korea’s nuclear weapons and missile programs may be intended to achieve a strategic breakout by altering the balance of power on the peninsula and in the region, enabling the Kim Jong II regime to deal from a position of strategic deterrence.\textsuperscript{56}

According to a March 1999 South Korean report, at least four missile-producing factories have been confirmed to be in operation in the North with the ability to produce more than 100 Scud C missiles annually.\textsuperscript{57} In addition, a South Korean intelligence official stated that ten missile launch sites had been confirmed in the North with two new bases that were under construction and that three sites appear to be aimed at Japan. If these reports are true, North Korea’s ballistic missile program can only be understood in the context of a comprehensive strategic policy. In particular, if one assumes that North Korea’s primary strategic utility stems from its...
ability to threaten the political, economic, and military integrity of the ROK, ballistic missiles play a central role in fostering Pyongyang’s coercive strategy. Giving up these very assets voluntarily or through negotiations will mean a 180-degree turn in North Korea’s national security strategy – a step which North Korea is unlikely to take even after post-summit euphoria.

**South Korea’s missile programs**

South Korea’s primary strategy for dealing with North Korea’s missiles has been focused on three pillars: crafting a package deal for the North together with the United States and Japan, assuring Pyongyang that it has no intentions of absorbing the North, and enhancing its deterrent assets; specifically, modernizing its air defense capabilities and developing its own medium-range ballistic missiles. As noted in the introduction, South Korea is currently constrained from developing ballistic missiles (both SSMs and SAMs) under the 1990 missile accord with the United States. The South Korean missile inventory consists of twelve NHK-1/2 SSMs (otherwise known as the Hyunmu), 110 HAWK I and 200 Nike Hercules SAMs and various man-portable SAMs. South Korea’s ballistic missile program began in the early 1970s under the Park Chung Hee government (1961–79).

From the late 1960s onward, Park’s defense modernization strategy was focused on four key pillars: (1) maintaining a strong alliance with the United States; (2) building an industrial base that could spur home-grown defense industries; (3) modernizing the ROK forces; and (4) developing an indigenous ballistic missile program. Park placed a special emphasis on retaining greater defense self-sufficiency since he felt that the United States was not willing to transfer leading-edge weapons systems to South Korea. The Agency for Defense Development (ADD) was set up in 1970 to develop a range of weapons systems, including ballistic missiles. In December 1972, Park directed the ADD to develop and test-fire an indigenous ballistic missile with a range between 100 and 150 km by 1976. The ADD began from scratch and successfully test-fired the Paekkom or NH-1 in September 1978.

The origins of the follow-on Hyunmu (or Hyunmu-2) program traces back to late 1983 after the Rangoon bombing of October 1983 when North Korean agents killed seventeen members of Chun Doo Hwan’s entourage during a state visit to Burma, the Blue House directed the ADD to begin working on a follow-on to the Paekkom or the Hyunmu-1 missile. The Hyunmu-1 development test occurred in September 1986 and the missiles were deployed in 1987. As North Korea accelerated its missile program in the 1980s and test-fired the Nodong-1 in late May 1990, South Korea became increasingly alarmed at North Korean missile capabilities. In May 1993, North Korea undertook its largest ballistic missile test with four Hwasong 5/6 (modified Scud B/C) and one Nodong-1. This test convinced
the ROK that it had to develop SSMs with sufficient range to counter North Korea’s missiles. The main obstacle was the follow-on agreement signed in 1990 to the 1979 accord which constrained South Korea from developing ballistic missiles over 180 km. Discussions with Washington began in 1996 to renegotiate the 1990 agreement which expired at the end of 1999.

In April 1999, the ADD test-fired the follow-on Hyonmu-2 missile with a range of 40 km and reached a height of 38 km. According to local press reports such as the Korea Herald, the Hyunmu-2 has the capability of reaching 296 km, or well above the 180 km ceiling placed by the ROK–US accord. Discussions between Seoul and Washington that began in 1996 initially focused on a US proposal for South Korea to join the Missile Technology Control Regime (MTCR) but, at the same time, to adhere to the 180 km ceiling. This was unacceptable to South Korea since the MTCR only constrains missile and component technology transfers with a ceiling beyond 180 km and a payload greater than 500 kg.

With the testing of the Taepodong-1 in August 1998, however, Washington’s argument in holding up South Korea’s own missile program became increasingly less convincing and discussions began to focus on accommodating South Korea’s request – provided that it accounted for virtually full transparency from the research phase. This point remains as a major issue between the two sides since South Korea insists that it is willing to share information on its missile program after the R&D phase (i.e., production), whereas Washington apparently continues to assert the need for transparency from the research phase. According to a March 1999 Defense News article, a South Korean national security council official commented that Seoul is seeking to develop its own MRBM, and that TMD was not a militarily useful solution to the North Korean missile threat. In addition, ‘the underlying logic is we [South Korea] need to have a deterrent capability. Our government wants a missile capable of reaching Pyongyang and beyond.’

During the July 1999 Kim–Clinton meeting at the White House, President Kim Dae Jung delivered the government’s position that since the US had already consented to South Korea’s development of ballistic missiles with ranges up to 300 km, ‘we should be allowed to develop and test-fire one in the 500 km range.’ A defense ministry official also noted that ‘what we want is not production of missiles with a range of 500 km, but to test-fire one for research and development.’ No agreement was reached on the 500 km issue. In subsequent discussions between Secretary of Defense William Cohen and Minister of Defense Cho Song Tae in July 1999, it was reported that with South Korea’s entry into the MTCR, it would be free to develop missiles up to 300 km or enough to reach Pyongyang. According to the International Herald Tribune, ‘South Korean officials have said privately that such missiles could probably travel 500 kilometers, enough to reach almost any target in the North.’ Discussions
between Seoul and Washington continued in the spring of 2000 but, to date, no definitive agreement has been reached by the two sides.

As part of South Korea’s efforts to upgrade its defenses against North Korean missiles, Seoul is going to acquire around 100 AGM-12 ASMs ahead of schedule in 2000. The South Korean ministry of defense began to consider the procurement of the AGM-12 ‘Popeye’ missiles in 1996 but the financial crisis that erupted in 1997 postponed new acquisitions. In particular, after the Western Sea incident in mid-June when South and North Korean vessels exchanged fire for the first time since the Korean War, the ROK Navy became concerned that North Korea may retaliate with Silkworm anti-ship missiles. The missiles can be fired from an F-16 and is reportedly able to destroy very specific targets including bunkers, command, control and communication centers, and even launch vehicles on the ground. Should North Korea choose to mount another attack on South Korean naval vessels, the AGM-12 missiles could be used for pinpoint surgical strikes.

Beyond the goal of developing a medium-range missile, South Korea’s air defense modernization has also focused on new-generation fighter aircraft (FX), early warning aircraft, improved battle management systems, enhanced surveillance systems, and surface-to-air missiles including ballistic missile defense. The government plans to spend $6.5 billion for new acquisitions during its ‘Mid-Term Defense Plan: 2000–2004.’ The ROK Air Force is slated to acquire up to sixty new fighters in order to augment the 120 F-16C/D. Initially, the ROKAF’s preferred option was to procure the F-15s but due to cost configurations, it will acquire twenty additional F-16s. Currently, the Air Force is considering the F-15K, the F/A-18E/F, the Dassault Rafale, the Eurofighter Typhoon, and the Sukhoi Su-35 as new-generation fighters. The Air Force also wanted to procure an early warning aircraft but this has been postponed until 2004.

In the ongoing security debate, whether Seoul should participate in a TMD program has also emerged as a significant issue. Ballistic missile defense first surfaced as a defense issue after the outbreak of the North Korean nuclear crisis in the spring of 1993. During the summer and fall of 1993, the USFK began to deploy Patriot missiles to protect US forces in South Korea and Washington queried Seoul whether it wanted to procure the Patriot missiles for its own defense. In the ensuing debate, the ROK government postponed a Patriot decision primarily for cost considerations, but also because of lingering suspicions that the Patriot would not be able to protect South Korea against North Korean Frog or Nodong missiles. Such a perception persists to this day, and has affected South Korea’s perception on TMD.

In May 1999, the South Korean government officially announced that it was not going to participate in a Northeast Asian TMD system. Earlier, then Minister of Defense Chun Yong-Taek announced that ‘given the ROK’s economic and technological capabilities, a TMD system is not an
efficient way to respond to North Korea’s missile threat.\textsuperscript{71} The government’s decision, which was reiterated by President Kim on May 11, is based primarily on three reasons.\textsuperscript{72} First, South Korea does not have the financial resources to participate in a major TMD effort since it could run into billions of dollars. Second, while North Korean ballistic missiles pose a real threat, the more immediate military threat stems from North Korea’s long-range artillery that are deployed along the demilitarized zone (DMZ) and a TMD system cannot defend the South from a North Korean artillery attack. Third, South Korean participation could result in negative political consequences, i.e., a downturn in South Korean–Chinese relations.\textsuperscript{73}

In addition, there exists a curious perception in South Korea \textit{vis-à-vis} North Korean missiles and missile defense systems. For example, there is a perception in South Korea that while North Korean missiles are a threat, Seoul should not be overly concerned about long-range missiles since they are targeted principally against Japan and the United States. At another level, there are those who argue, including South Korea’s radicalized student movement, that South Korea should not be over-sensitive about North Korea’s missile because Pyongyang is not likely to use weapons of mass destruction against fellow Koreans, and that at any rate, once Korea is unified, it will have WMD assets to protect itself against the major powers. Further, there is a prevailing perception that the United States sporadically inflates the North Korean threat in order to ensure that South Korea will buy more advanced weapons systems from the United States.\textsuperscript{74}

\textbf{Regional strategic implications}

Although it is difficult to project the types of forces that will emerge in East Asia over the next two decades, a number of regional countries are likely to emphasize more sophisticated power projection technologies including RMA-driven weapons systems. Among the non-nuclear states in the region, Japan has the most advanced defense R&D infrastructure, followed by South Korea, Taiwan, and selected ASEAN countries. Until the disappearance of, or a fundamental diminution of, the North Korean threat, however, the ROK and the regional powers will continue to pay close attention to North Korea’s overall WMD capabilities.

For the ROK, its principal security concerns in the post-unification era are likely to focus on force modernization trends in the Chinese People’s Liberation Army (PLA), especially its air force and navy, the potential resurgence of Russian forces in the Far East, a more active Japanese security posture, and the level of US strategic engagement in the region.\textsuperscript{75} Other factors will also be taken into consideration such as the need for information-dominant systems to meet information warfare challenges as well as strategic and tactical intelligence platforms. Over the long run, air and naval force projection capabilities, battlespace denial capabilities (such as submarines), and advanced strategic conventional technologies are
likely to emerge as key sources of concern since all of the major regional players have, or will acquire, the ability to procure and deploy more advanced force projection capabilities.

At the regional level, if Pyongyang continues to emphasize WMD capabilities as a key element of its military strategy and is not dissuaded from pursuing an aggressive ballistic missile program, it will push South Korea and Japan toward more aggressive counter-proliferation policies. To date, and into the foreseeable future, however, it is highly improbable that either Japan or South Korea would begin a concerted WMD program. First, Tokyo and Seoul retain significant benefits from their alliance with the United States and a move toward a WMD program would shatter the alliance. Second, both are parties to a wide range of non-proliferation treaties, regimes, and accords. Unless South Korea and Japan are willing to discard their respective international treaty obligations with certain political, diplomatic, and even economic sanctions, it is highly unlikely that Seoul or Tokyo would pursue a break-out strategy. Third, a concerted WMD program would provide the single greatest excuse for China to pursue an aggressive political–military strategy in East Asia with repercussions throughout the Asia-Pacific region. Fourth, it would demolish South Korean and Japanese credibility in the international community and wreck future opportunities for more active roles in key international organizations such as Japan’s long-term desire to secure a permanent seat on the UN Security Council. And fifth, such a move would trigger offense-dominant strategies throughout the region and fan a debilitating arms race.

Any widespread proliferation of WMD technologies in the region with advanced delivery systems would, at a minimum, have the following repercussions: (1) it would encumber, if not significantly constrain US power projection operations including rapid reinforcements in an acute crisis; (2) it would result in increased vulnerability among states that do not have the ability to field such systems; (3) it would weaken US conventional deterrence and defense capabilities and increase the cost of mounting conventional operations against states possessing WMD capabilities; and (4) it would result in increased pressure towards even greater horizontal WMD proliferation.76

To the extent that an increasing number of East Asian forces are likely to introduce various elements of RMA technologies and systems, the fundamental ‘strategic space’ in which these forces will operate over the next two to three decades cannot but also change. Beyond the threat posed by North Korea's WMD arsenal, a larger strategic change lies over the horizon. Throughout much of the Cold War, no East Asian country, other than China after it became a nuclear power, had the capability to inflict significant military damage to another state based on significant air power, naval platforms, ballistic, or cruise missiles. Even in the case of China, while nuclear weapons provided it with a ‘great power’ status its nuclear capability was far behind that of the United States and the Soviet
Union. It did not have ICBM capabilities during the Cold War although it currently has 17 ICBMs (7 DF-5 and 10 DF-4). While the current air power inventory of the Northeast Asian militaries varies quite significantly from country-to-country, combat aircraft, attack helicopters, and ballistic and cruise missiles have already emerged as important regional airpower modernization components.

Given the current Chinese strategic emphasis on ‘limited local wars,’ rapid mobility and firepower for border contingencies are likely to be stressed by the PLAAF. The key problem, however, is that while the PLA recognizes the need to upgrade its power projection capabilities, particularly naval, air, and ballistic missile capabilities, there is a significant gap between its current aircraft inventory and future doctrinal and operational requirements. For this reason, air force modernization has received a high priority in China’s foreign weapons and technology acquisitions, especially those from Russia but also from Israel and other sources.\(^{77}\) In addition, an ‘emergent RMA with Chinese characteristics’ would enable China to pursue more aggressive asymmetric strategies toward the United States and Japan by giving the PLA ‘accurate and destructive, but relatively cheap systems with which to threaten high-value platforms such as aircraft carriers.’\(^ {78}\) Finally, the perceived need for more advanced air powers projection capabilities stems largely from intra-regional features such as the declining likelihood of large-scale ground wars (with the notable exception in the Korean Peninsula) and the corresponding shift towards overcoming gaps imposed by geography.\(^ {79}\)

**Consequences and future paths**

North Korea’s ballistic missile threat stands out as one of the most serious proliferation challenges in the post-Cold War era. Understanding Pyongyang’s overall WMD strategy and crafting appropriate policy responses, however, have been complicated by four key developments: an increasingly bifurcated security debate within South Korea following the June South–North summit; divergent political currents and security perceptions among South Korea, the United States, and Japan; the desirability – however unpalatable – of paying-off North Korea to desist from pursuing robust ballistic missile programs; and the potential for structural change in North Korea including implosion or collapse.

Given the importance of preventing war or a major crisis on the Korean Peninsula, trilateral policy coordination has placed a premium on a two-track strategy, e.g., persuading North Korea to go down the road of engagement while at the same time enhancing US–ROK–Japan deterrence and defense capabilities.\(^ {80}\) As noted in the October 1999 Perry Report:

> the proposed strategy is flexible and avoids any dependence on conjectures or assumptions regarding DPRK intentions or behavior
– benign or provocative. Again, it neither seeks, nor depends upon, either such intentions or a transformation of the DPRK’s internal system for success.\textsuperscript{81}

The fundamental problem, and the primary reason for concern, is that neither engagement nor a policy which combines coercive diplomacy and deterrence, can be construed as sufficient conditions for resolving the North Korean ballistic missile problem. North Korea’s ballistic missiles not only serve strategic purposes, they are also inextricably linked to regime survival and preservation of the DPRK’s principal raison d’être. For these reasons, North Korea’s WMD and ballistic missiles cannot be divorced from internal politics and structural imperatives. Thus, despite the promises enshrined in the engagement strategy including inducements, security assurances, and resolute opposition to unification through absorption, North Korea is unlikely to exchange its WMD and ballistic missile arsenals for enhanced economic benefits and enhanced political recognition. Without WMD and ballistic missiles, North Korea would be losing the very assets that ensure survival since the DPRK’s sustainability – in physical, spatial, and conceptual terms – depends critically on maintaining credible strategic threats to its principal adversaries. The key irony is this: the day that North Korea becomes a ‘normal’ state, it will also signal the end of the DPRK as we know it.

The use or threat of force, including strategic offensive weapons systems, as an instrument of state policy is certainly not unique to North Korea. As the ongoing Indo-Pakistani tit-for-tat illustrates, conceptions of security, including the introduction of WMD, can transcend rational strategies or the balance, however imperfect, between threats, responses, and commensurate military capabilities. North Korea provokes crises, indeed thrives on them, for a variety of reasons but the most compelling one boils down to the nature of the DPRK: a Stalinist state which survives on the basis of sustaining a siege mentality. And as one of the primary instruments of maintaining state and regime integrity, North Korea’s ballistic missiles are unlikely to be negotiated away.

That said, supporters of engagement argue that the 1994 US–North Korea Nuclear Agreed Framework provides a precedent for a negotiated settlement of the ballistic missile issue. Indeed, engagement proponents have stressed repeatedly that despite the threat posed by the Nodong and Taepodong missiles, Pyongyang’s fundamental motivation is to use them for diplomatic leverage and hard-currency gains. Patience, dialogue, and the correct mix of incentives will ultimately persuade North Korea to accept a package deal. To be sure, such a possibility cannot be discounted, especially following the South–North summit and prospects for enhanced CBMs including the establishment of a military hotline.\textsuperscript{82} If South Korea, the United States, and Japan collectively provide what Pyongyang is seeking, such as $3 billion in compensatory payments to stop missile sales
to the Middle East, then North Korea could bargain away its ballistic missiles. Such a deal, however, would generate tremendous political fallout in South Korea and the United States, including the incoming US administration in January 2001 if it chooses to implement such an option. In sum, at least five approaches could be considered in dealing with the North Korean missile issue.

1 **Maintaining the Perry Process.** This is the preferred path which is currently being pursued by South Korea and the United States. While the Perry Report takes into account non-linear scenarios and potential responses in the event North Korea ultimately chooses not to join the Perry Process, Seoul and Washington believe that this is the best approach to resolve the North Korean missile problem. In exchange for appropriate security guarantees, the lifting of most economic sanctions by the United States, normalization of US–DPRK and Japan–DPRK relations, and significant economic assistance from South Korea, the hope is that North Korea will also significantly reduce its missile arsenal, enforce a permanent moratorium on long-range missile tests, and to also sharply curtail, if not stop, missile exports to third countries.

2 **Significant progress in South–North arms control.** If South and North Korea are able to institutionalize a mutually verifiable arms control regime including intrusive on-site inspections, reconstitution of forces and heavy artillery across both sides of the DMZ, pre-notification of exercises, and other military CBMs, progress on the North Korean missile issue could be realized. Specifically, in return for North Korea’s promise to incrementally freeze and ultimately disestablish its long-range missile program, the two Koreas could enter the Missile Technology Control Regime (MTCR) and adhere to the provisions of the MTCR. In addition, the South could also promise to curtail, if not freeze, its own ballistic missile modernization program. If substantial progress occurs in these areas, the United States could also re-evaluate the role of the US forces in South Korea.

3 **Conclusion of a peace treaty.** Technically still at war in the absence of a permanent peace treaty, the two Koreas, the United States, and China could expedite the ongoing Four Party Talks with the aim toward the signing of a peace treaty to replace the 1953 armistice agreement. Alternatively, a tripartite peace treaty could be signed between the two Koreas and the United States. Such a treaty would also mean that the status of the United Nations Command could be reviewed although the issue of US forces in South Korea would be dealt with bilaterally between Seoul and Washington on a separate track provided that both sides felt the need to do so.

4 **A Korean variant of the Zero–Zero option.** If significant progress can be reached in inter-Korean arms control as noted above, the two Koreas,
together with the United States, could reach a Korean version of the Zero–Zero option. In other words, the two Koreas would agree to a ceiling on the range and deployment of surface-to-surface ballistic missiles and the United States would also agree not to deploy missiles in South Korea beyond the ceiling agreed to by the two Koreas. A highly intrusive inspection regime would have to be agreed upon and put into practice for such an option to work.

5 **Coercive diplomacy, BMD, and enhanced deterrence.** If progress in inter-Korean CBMs does not materialize to the extent desired, if South–North dialogue does not bear fruit beyond symbolic measures, and if North Korea continues to develop, test, and ultimately deploy long-range ballistic missiles, the ROK and the United States could fundamentally reassess the engagement track. While diplomatic channels would not be ignored and some elements of the Perry Process would continue, Seoul and Washington could decide on more pro-active counterproliferation strategies such as South Korea’s decision to field a robust ballistic missile defense system or a Korean version of a national missile defense (NMD) system, modernization of South Korea’s own SSMs, and other deterrence-enhancement measures by the ROK–US Combined Forces Command.

To date, elements of all five policy options have been pursued in one form or another although the primary emphasis has been placed on mixing options 1 and 5, or engagement with deterrence. As noted above, significant progress in inter-Korean arms control and CBMs could result in a breakthrough over the missile issue. Nevertheless, despite some similarities in the nuclear deal of 1994 and the North Korean missile crisis fueled by the Taepodong launch in 1998, there are critical differences. Most important, North Korea’s missile programs do not violate international law or multilateral arms control agreements and this provides Pyongyang with much more political and diplomatic maneuverability. In other words, one of the key reasons why North Korea chose to sign the 1994 Agreed Framework was because it was a party to the NPT and withdrawal would have most likely resulted in UN Security Council-sponsored sanctions and other South Korean and US responses.

Chinese and Russian support also remained crucial in the intense negotiations that led to the Agreed Framework since neither Beijing nor Russia wanted North Korea to have nuclear weapon capability. Although the four major powers do not see eye-to-eye on a range of issues related to North Korea and the Korean Peninsula, they agree that a nuclear-armed North Korea does not serve regional or national interests. That said, North Korea’s ballistic missile programs do not adversely affect Chinese or Russian security. Indeed, an argument could be made that North Korea’s ballistic missiles enhance Chinese interests to the extent that it complicates South Korean, American, and Japanese policy responses toward
North Korea. So long as North Korea does not break out of the envelope, Pyongyang’s missile threats complement China’s own strategy in Northeast Asia, i.e., strengthening a Sino-North Korean ‘united front’ against the United States, South Korea, and Japan as well as changing the context of the NMD and the TMD debate in the United States. For China, such a strategy also pays dividends vis-à-vis its relationship with South Korea and Japan since plausible deniability is already built-in.

If so, such a strategy is going to ultimately backfire against China since North Korea’s ballistic missiles and its weapons of mass destruction, left unchecked, could spur more robust security responses on the part of Japan and South Korea. Beijing has vociferously attacked Japan’s participation in a TMD system but Japan is unlikely to back away based on Chinese opposition. The South Korean case on TMD is different since Seoul has decided not to participate in a TMD system although the North Korean missile threat has convinced South Korea that it has to develop its own ballistic missiles with ranges at least up to 300 km.

How the North Korean missile problem will eventually evolve remains uncertain but diplomacy and engagement, in the final analysis, are unlikely to untie the North Korean missile knot. For South Korea and the United States, upgrading deterrence in parallel with an engagement strategy is the preferred option in coping with the North Korean missile threat. But this strategy, despite its political attraction, is not going to convince the North Koreans to freeze, much less dismantle, its ballistic missile program. It should also be noted that while South Korea and the United States have so far been able to formulate joint policy responses, accelerated improvement in inter-Korean relations could result in new areas of friction between the United States and South Korea. Despite ongoing assurances from Seoul that it places the highest priority on maintaining the ROK–US alliance, the temptation exists, and may well increase, to expedite the process of ‘Koreanizing’ the Korean Question at the partial expense, even if unintended, of the Seoul–Washington alliance.

In the final analysis, unless South Korea and the United States are willing to take significant risks to convince North Korea that an accelerated missile program may result in dire consequences such as aggressive counter-deployment, accelerated adoption of other countermeasures such as a regional TMD system, the cessation of economic assistance and political dialogue, the stark reality is that deterrence and engagement will not successfully defang North Korea. Even as South Korea and the United States move toward a pay-off game plan in the hopes of freezing Pyongyang’s ballistic missile ambitions, such a strategy may ultimately come to haunt Seoul and Washington.

Notes

1 See Don Oberdorfer, *The Two Koreas* (Reading, MA: Addison Wesley, 1997), pp. 306–9 and 312. Oberdorfer notes that the US government was increasingly
convinced that conflict could occur in the period leading up to the summer of 1994. He writes, in part, that ‘Preparations were being made in Washington for a much more powerful buildup of men and material, with great potential for precipitating a military clash on the divided peninsula.’

2 Paul Bracken argues that the East Asian militaries’ acceleration adoption of disruptive technologies such as ballistic missiles, cruise missiles, and biological/chemical weapons are enabling them not only to catch up with the West, but in the process, significantly narrowing, if not gradually negating the capabilities gap. See Paul Bracken, *Fire in the East: The Rise of Asian Military Power and the Second Nuclear Age* (New York: HarperCollins, 1999), especially pp. 71–95.

3 Jane Perlez, ‘North Korea’s missile pledge paves the way for new talks,’ *New York Times*, June 22, 2000, http://www.nytimes.com/library/world/asia/062200nKorea-missile.html. North Korea’s announcement coincided with a significant lifting of US sanctions on North Korea under the Trading With the Enemy Act, the Export Administration Regulations, and the Defense Production Act which have been in place since the Korean War. However, the Clinton administration also noted that ‘this easing of sanctions does not affect our counter-terrorism or nonproliferation controls on North Korea, which prohibits exports of military and sensitive dual-use items and most types of U.S. assistance.’ For details, see US Department of State, ‘Implementation of easing of sanctions against North Korea,’ *Fact Sheet*, June 19, 2000, http://www.state.gov/www/region/eap/fs-nKorea_sancs_000619.html.


5 The Ministry of Unification announced a few days after the summit that, henceforth, North Korea should no longer be characterized as the ‘main enemy’ as has been referred to in most defense-related announcements and reports. Subsequently, however, this statement was rebutted by the Minister of National Defense Cho Sung-Tae who stated that ‘so long as credible threat remains, the ministry sees no immediate need to change our threat perception.’ *Chosun Ilbo*, June 22, 2000, p. 1.

6 Official organs of North Korea such as the *Nodong Shinmun* (*Workers’ Daily*) and the Korean Central News Agency often refers to South Korea as a ‘splittist,’ i.e., perpetuating the division of the Korean Peninsula and pursuing ‘anti-nationalistic and anti-unification’ policies. When South Korea applied for UN membership in October 1990 and both China and the Soviet Union chose not to oppose South Korean membership in the Security Council, Pyongyang criticized Seoul for promoting ‘splittist’ policies although North Korea also applied for membership when it became apparent that Beijing and Moscow would ultimately support South Korea’s application.


11 The 1990 bilateral missile accord (actually a diplomatic note exchanged between South Korea’s foreign ministry and the US state department) signed between Seoul and Washington is a follow-on agreement to the 1979 accord.
According to Peter Bartholomew, a consultant in Seoul, the missile constraints were imposed ‘under duress in an extremely negative context.’ See Don Kirk, ‘Seoul wants US to back missile with more range,’ International Herald Tribune, July 2, 1999, p. 4. For additional details on Park Chung Hee’s missile program, see Shin Dong-A, March 1999.

12 Choi Sang Yeon, ‘Swa baya 180 km ... balmuk-in misail’ [Only 180 km after launch ... limited missiles] Joongang Ilbo, April 2, 1999, p. 5.


18 According to a 1997 Congressional report on non-proliferation challenges world-wide, North Korea’s ballistic missile program was one of the most serious threats.


20 Jim Lea, ‘Cohen: US, South Korea won’t rule out force against NK,’ Stars and Stripes, July 31, 1999, p. 1. At the same time, however, South Korean Foreign Minister Hong Soon-young stated on July 31 that South Korea and the United States were not considering any type of military response in the event of second test. See Chosun Ilbo, July 31, 1999.

21 According to the Bank of Korea (Seoul), North Korea’s GDP has contracted every year since 1990. In 1998, its GDP was estimated at $22 billion. Defense spending as a percentage of GDP is based on the Defense White Paper 1998–1999 (Seoul: Ministry of National Defense, 1999), p. 45. Reliable figures for famine victims in North Korea are virtually non-existent. The South Korean ministry of unification estimates that between 300,000 and 500,000 North Koreans may have died from starvation and famine-related illnesses.

22 According to the Bank of Korea, the North Korean GDP grew by 1.3 per cent in 1999 after nine years of consecutive contraction. Overall, however, the North Korean economy continues to suffer from widespread structural decay.


24 The status of US Forces in Korea has received significant attention in the post-summit period. During a press conference which was held on June 23 in Seoul, US Secretary of State Madeleine K. Albright and South Korean Minister of Foreign Affairs Lee Joung-Bin were repeatedly asked whether the summit could result in a downsizing of the US Forces or a change in their status. Albright stated that ‘any discussions of lowering numbers or withdrawal are not appropriate and are premature.’ Lee noted that ‘the American forces will be needed here even after the establishment of a peace regime on the Korean Peninsula.’ Press conference by Secretary of State Madeleine K. Albright and Korean Minister of Foreign Affairs and Trade Joung Bin Lee held in Seoul.

25 The term ‘engagement school’ is being used here in the broad context of a more flexible perception of North Korea’s underlying strategic motivations and the need to formulate policy alternatives that will reduce North Korea’s sense of vulnerabilities resulting ultimately in more positive external linkages.

26 For example, in hearings before the National Assembly following the June summit, members of the governing party reiterated that peace and reconciliation on the peninsula could only be reached if efforts were made not to ‘antagonize the North.’ The party also cancelled commemorative events over the 50th anniversary of the outbreak of the Korean War on June 25, 2000, while opposition leader Lee Hoi Chang gave a series of speeches calling for ‘continued vigilance’ and a ‘strong national defense posture’ particularly following the euphoria surrounding the South–North summit.

27 Particularly since the advent of the Kim Dae Jung government, preventing a North Korean collapse and ruling out the absorption option along the German model have received highest political support. In such an environment, sustained engagement with the North has emerged as the nucleus of Seoul’s overall strategy vis-à-vis the North. And as one core supporter has noted, ‘[t]he sunshine policy is often accused of being a fragile appeasement policy or the policy of the weak. In actuality, however, it is an extremely offensive and proactive policy.’ (Emphasis added.) See Chung-in Moon, ‘Understanding the DJ doctrine: the Sunshine Policy and the Korean peninsula,’ in Chung-in Moon and David I. Steinberg (eds) Kim Dae-jung Government and Sunshine Policy: Promises and Challenges (Seoul: Yonsei University Press, 1999), p. 29.


33 ‘Namjoeson eui Poyong Jeongchek eul Haebu Handa’ [Dissecting South Korea’s embracement policy], Nodong Shinmun, June 4, 1999, as reported in North Korea Today, June 5, 1999, pp. 2 and 5. The term ‘People’s Government’ or ‘Government of the People’ was coined by the Kim Dae Jung government to differentiate it from previous administrations, i.e., that it is the most democratic and the most populist government to gain power in South Korea. For its part, the Kim Young Sam government referred to itself as the ‘Civilian Government’ or as the first non-military government since 1961.


35 Interestingly, Kim Dae Jung told Kim Jong Il why US forces in South Korea were needed and that they were stationed to maintain regional stability. Kim also stated on June 19 that the ‘two sides expressed their views on the US forces issue and that there existed more consensus than before,’ hinting that the North apparently remains more flexible over the US forces issue. Nevertheless, official North Korean announcements after the summit have continued to call for the withdrawal of US forces from South Korea.


For example, Shunji Taoka has argued that a ‘very poor’ CEP of the SCUD missiles, combined with their limited payload means that ‘the tactical value of SCUDS are even lower than jet trainers.’ He also argues that based on the Iraqi launch of SCUDs during the Gulf War and resultant public reactions in Tel Aviv and Riyadh, a North Korean SCUD attack on Seoul would not result in widespread panic. Shunji Taoka, ‘Air forces of the two Koreas: a comparative analysis,’ paper presented in the ‘First International Conference on Air Power in 21st Century Korea,’ co-organized by the Center for International Studies, Yonsei University, the Institute of East and West Studies, Yonsei University, and the Pacific Century Institute, May 22–23, 1998, pp. 86–90.

There is no consensus on the current and projected state of North Korea’s potential nuclear weapons program. The 1994 nuclear accord was put in place to ‘freeze’ North Korea’s nuclear program although, of late, new concerns have surfaced such as the discovery of new underground facilities that could be used for nuclear weapons development. For the purposes of this paper, the basic assumption is that while North Korea is not a nuclear weapon state, it has the capability to develop a small number (3–4) of nuclear warheads.


Proliferation: Threat and Response, p. 8.


Ibid.


51 Japan launched an official protest directly to North Korea through the foreign ministry on August 31 and on September 1, 1998, Chief Cabinet Secretary Hiromu Nonaka announced a series of responses such as suspending normalization talks with the North, stopping food and other aid to North Korea for the time being, and suspension of Japan’s activities in KEDO. See ‘Announcement by the Chief Cabinet Secretary on Japan’s immediate response to North Korea’s missile launch,’ *Press Announcement*, Ministry of Foreign Affairs, September 1, 1998, [http://www/mofa.go.jp/announce/announce/1998/9/01–2.html](http://www/mofa.go.jp/announce/announce/1998/9/01–2.html).


53 Various explanations have been given for North Korea’s missile test including the celebration of Kim Jong Il’s official elevation as ‘Great Leader.’ What was interesting was that many analysts in Seoul and abroad while recognizing the dangers posed by North Korea’s ballistic missiles, still continued to perceive the launch as essentially non-threatening. For example, Leon Sigal wrote in November 1998 that ‘the launch was more likely an unsuccessful attempt to mark Kim Jong Il’s formal accession to power by boosting a small satellite into space than a brazen act of intimidation aimed at Japan. Over reaction to the test will impede diplomacy, which is the most promising way to curb Pyongyang’s missile program.’ Leon V. Sigal, ‘For sale: North Korea’s missile program,’ *East Asian Security*, [http://www.nyu.edu/globalbeat/asia/Sigal111198.html](http://www.nyu.edu/globalbeat/asia/Sigal111198.html).

54 *Chosun Ilbo*, September 1, 1998. Minister Chun was subsequently appointed as the Director of the National Intelligence Service but retired abruptly in November 1999 after an unauthorized press interview.


57 Lee Sung-yul, ‘North Korea operates at least 4 missile factories, 10 launch sites, official says,’ *Korea Herald*, March 26, 1999.


59 The development of the Paekkom or NH-1 (also referred to as the K-1 project) began with reverse engineering the US Nike Hercules. According to Koo Sang Hwe who was the deputy director of the so-called ‘Thunder Two Project Team’ that was charged with the Paekkom SSM project, while the Nike Hercules was taken as a basic reference, 90 per cent of the Paekkom was derived from Korean technology including the software for the guidance system, propulsion system, and warhead. Ibid.

60 Although the Hyunmu missile was developed under directions from Chun Doo Hwan, he was also responsible for gutting the original missile team in the ADD.


Ibid.


The AGM-12 ASM was jointly developed by Lockheed Martin and Israel’s Raffaele in 1986 and this is the first time that South Korea has decided to procure them. According to a South Korean defense official, ‘the Hyonmun missile has a range of only 180 km which means that when necessary, South Korean missiles cannot hit North Korean missile sites that are situated above Pyongyang’ but with the AGM-12 missiles, it can do so. *Donga Ilbo*, July 28, 1999, p. 1.


*Hankook Ilbo*, March 6, 1999.

In an interview with the Voice of America on May 11, President Kim stated, in part, that ‘Seoul is located within 40 km of the DMZ, an unsuitable geographic condition for the TMD concept’ and noted also that the TMD system ‘is of no benefit to the defense of South Korea.’ See *Hankook Ilbo*, May 11, 1999.

*Yonhap News Report*, May 4, 1999. According to private discussions with senior ROK foreign ministry officials, Seoul’s decision not to participate in a TMD system was ‘welcomed’ by the Chinese. One high-ranking official told the author recently that ‘our minister gave assurances to the Chinese that we would not participate in a TMD system and the Chinese expressed their gratitude for our decision.’

For instance, South Korea’s leading left-of-center daily, the *Hangyore Shinmun*, has reported that ‘the United States announced its plan to deploy a TMD system in the ROK even though the ROK lacks technology with which to develop the TMD system. This is an act of virtually forcing the ROK to purchase US-made Patriot missiles for the SAM-X project. This gives rise to controversy.’ *Hangyore Shinmun*, May 2, 1999.

Compared to its Cold War standing, the Russian armed forces have atrophied significantly across the board and it will take a significant amount of time before Russia’s general-purpose forces are able to regain its pre-collapse capabilities. Nonetheless, Russia still retains its status as the second most powerful nuclear state with significantly advanced military R&D capabilities. Although it will take tremendous financial commitments coupled with overall political and economic stability, Russia’s force projection capabilities cannot be ignored.


Tellis, op. cit., p. 61.

The three governments set up the Trilateral Coordination and Oversight Group (TCOG) to coordinate policy toward North Korea. The TCOG holds regular meetings not only to lay down broad policy guidelines, but to also respond to particular developments such as the South–North summit, US–North Korea
missile talks, Japan–North Korea normalization talks, and other issues of mutual concern. The TCOG was set up after the North Korean missile test of August 1998 and gained momentum when the Perry review was begun in the fall of 1998.

Perry also refers to contingencies in case North Korea chooses to go down the path of confrontation: ‘The policy review team notes that its proposed responses to negative DPRK actions could have profound consequences for the Peninsula, the US and our allies. These responses should make it clear to the DPRK that provocative actions carry a heavy penalty. Unless the DPRK’s acts transgress provisions of the Agreed Framework, however, US and allied actions should not themselves undermine the Agreed Framework.’ William J. Perry, Review of United States Policy Toward North Korea: Findings and Recommendations (Washington, DC: The Department of State, October 12, 1999), http://www.state.gov/www.regions/eap/991012_northkorea_rpt.html.

President Kim Dae Jung announced in a speech on June 25, 2000, to commemorate the 50th anniversary of the outbreak of the Korean War that the two Koreas had agreed to set up a military hotline. Whether or not such a hotline will become operational in the near future remains to be seen but the two sides already agreed to establish a similar hotline back in 1991 when the South and the North signed the Basic Agreement.