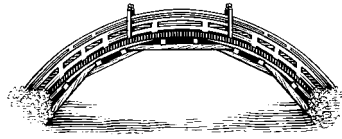


SPECIAL ROUNDTABLE

What If?
Economic Implications of a Fundamental
Shift in North Korean Security Policy



Nicholas Eberstadt & Richard J. Ellings

Bradley O. Babson

Marcus Noland

Introduction

Nicholas Eberstadt & Richard J. Ellings

While many parts of the world have joined in the profound international integration that has occurred in the postwar era, the Democratic People's Republic of Korea (DPRK) has maintained a distinctly—perhaps uniquely—bellicose and autarkic international posture since its founding in 1948. Pyongyang's discordant approach to “international security” was most recently illustrated earlier this summer. As the United States was celebrating the Fourth of July, the DPRK launched seven missiles (including an inter-continental ballistic missile) into the Sea of Japan—a calculated and deliberately menacing violation of both international law and previous official commitments. Pyongyang then ostentatiously spurned Chinese emissaries sent to manage the incident, prompting Beijing to support—for the first time—the United Nations Security Council condemnation of, and sanctions against, North Korea's missile program.¹

If anything, North Korea's international behavior is perhaps more distant from evolving international security norms today than ever before. Contemporary North Korean security policy is marked by a hyper-militarization of society and economy under the banner of *songun chongchi* (military-first politics); hallmarks of the policy include maintenance and augmentation of chemical and biological weapon capabilities, ballistic missile development, relentless overt and covert nuclear weapons development programs, a confrontational approach to international diplomacy, and a stance toward unification that suggests the complete absorption of South Korea would be the only acceptable outcome. There is a grim logic at work here: Pyongyang routinely extracts resources from neighboring states and the international community through this careful, methodical recourse to “security crisis.”

North Korea's aggressive and predatory external bearing is an international dilemma that continues to defy easy resolution. Though the central issues in

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
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¹ Whether or not the sanctions are voluntary or legally binding is, however, a question open to interpretation.

the ongoing North Korean drama are strategic and political, there is also an economic aspect to the problem: until Pyongyang develops viable alternative sources of state finance, the DPRK will continue to rely upon international military extortion to bankroll state survival.

While having “exported” strategic insecurity, North Korea has at the same time also “imported” economic failure. Among the economies of East Asia, the DPRK economy alone has suffered prolonged economic retrogression since the end of the Cold War. For example, though reported world exports of merchandise more than tripled (in current US dollars) between 1990 and 2005, DPRK commercial merchandise exports are estimated to have *dropped* by about one-third.² Note that although an urbanized and literate society, North Korea has a level of per capita exports today that is roughly comparable to Haiti’s. In short, North Korea’s confrontational external posture has coincided with the deterioration of its economic self-sufficiency and a declining ability to finance state operations and state survival.

Given this close association between the degree of radicalization of North Korea’s security policy and the performance of the country’s domestic economy, the National Bureau of Asian Research (NBR) organized a research project and international conference to examine the economic consequences of two radically different courses that North Korean security policy could follow. The first, more optimistic scenario is one where North Korea would undertake a “bold switchover” by resolving regional security concerns regarding DPRK international behavior and thus opening the way for the international community to anchor this new security environment with substantial economic benefits for North Korea. This scenario is examined in the first two sections of the paper: section one overviews what exactly such a switchover would entail, while section two considers what aid might be available through the international financial community if North Korea were to implement such a positive change to its security behavior. The next section examines the likely outcomes of a second—and much more pessimistic—scenario: a North Korean nuclear breakout, commencing with the detonation of a nuclear weapon. A final section offers some thoughts regarding the future of the North Korean question.

² These statistics are derived from the World Trade Organization’s Statistics Database  <http://stat.wto.org/StatisticalProgram/WSDDBViewData.aspx?Language=E>.

WHAT IS A BOLD SWITCHOVER?

The starting point for this bold switchover conceptualization was the realization that, despite the DPRK's poor economic record, North Korea's economic situation is far from hopeless. North Korea's dismal economic performance must be understood as the consequence of Pyongyang's interpretation of "socialism with Korean characteristics," a policy in which hyper-militarization of the economy figures centrally. From a political standpoint, it is therefore possible to imagine a deal that meets the minimum basic demands of all sides—i.e., one that resolves North Korean military threats but allows for continued Communist rule in the DPRK. As a way out of the current impasse, North Korea might be induced to adopt a combination of "ordinary" Stalinist economic policy and "defense sufficiency."

In this thought experiment about a North Korean "bold switchover"³—a phrase that echoes the language that Pyongyang has used in a call for a redirected U.S. policy toward the DPRK—we have made two assumptions: (1) that the DPRK remains an independent socialist polity that is committed both to central economic planning and dictatorship of the proletariat and to a continuing partition of the Korean peninsula between the DPRK and the Republic of Korea (ROK)⁴ and (2) that a DPRK bold switchover would amount to the adoption of a doctrine of "defense self-sufficiency." Broadly speaking, such self-sufficiency would require that North Korea resolve regional security concerns regarding DPRK international behavior. For example, although North Korea could still maintain a significant (albeit not grotesque) conventional army, the DPRK would need to relinquish all nuclear ambitions. Additionally, Pyongyang would make concrete efforts to satisfy its neighbors' concerns about North Korea's biological, chemical, and ballistic programs; substantially demobilize conventional DPRK military forces; resolve the existing obstacles blocking the improvement of DPRK-Japanese relations; and work toward a position of genuine "co-existence" with South Korea, a move that would entail recognizing the legitimacy of the ROK as well

³ A fuller treatment may be found in Nicholas Eberstadt, "Economic Implications of a 'Bold Switchover' in DPRK Security Policy: Potentialities for A Still-Socialist DPRK Economic Policy, International Financial Assistance, and North Korean Economic Performance" (conference paper, "The Regional Economic Implications of North Korean Security Behavior: The 'Bold Switchover' Concept," sponsored by the National Bureau of Asian Research, March 2006), 5–40 ~ <http://nbr.org/programs/northeast/nkbs.pdf>. A shortened version of this paper is also available: Nicholas Eberstadt, "Economic Implications of a 'Bold Switchover' in DPRK Security Policy," *Korean Journal of Defense Analysis* 17, no. 1 (Spring 2005).

⁴ This bold switchover could be implemented by Kim Jong Il and his lineage or some alternative leadership faction. Thus we are only assuming here a change in "regime behavior" without stipulating a necessary concomitant change in "regime personnel."

as South Korea's right both to exist and to conduct its own defensive security policies—including defensive security alliances such as that between the ROK and the United States.

If the DPRK were to pursue a bold switchover in security posture, the opportunities both for economic transformation and for material advance would be immediate and significant. Both the DPRK leadership and the international community would have strong incentives to anchor a new security environment with substantial economic benefits for the North Korean people and significantly augmented resources for the DPRK state.

Such a bold switchover in security policies and practices would enhance the productive potential, trade performance, and financial stability of the North Korean state. To begin, an enormous amount of manpower and capital resources could be reallocated from military purposes to civilian enterprises. Given the massive scale of this possible redirection, a significant supply-side stimulus would result. Furthermore, such a reallocation would generate pressures to relax perverse policies and practices currently shackling the DPRK economy.

Naturally, a period of time would have to elapse before the switchover would elicit economic benefits. In economic and political terms, that period would constitute both the time of maximum vulnerability for the domestic economy and the time of maximum pressure on the government. These pressures could be mitigated, however, by new inflows of external aid.

Two distinct types of funding would be available from the international community: political aid and development aid. The former would be contingent upon a credible change in DPRK security policy, whereas the latter would be conditioned upon changes and reforms in North Korean economic policy.

Following a genuine security switchover, which governments would provide aid to Pyongyang, and how much would they be willing to give? We offer some very rough benchmarks below.⁵ In terms of political aid, South Korea could be anticipated to approve an additional \$2 billion or more per year, while Japan might give as much as \$1 billion per year over ten years—the type of package that was reportedly under consideration in 2000, the last time the prospect of normalization talks between Japan and North Korea was seriously broached. With a new and credible leadership in Pyongyang, even the United States might offer a few hundred million dollars per year.

⁵ These benchmarks are based perhaps more on the authors' own judgments rather than on any readily available reference source.

Development aid, on the other hand, would depend upon North Korea's willingness to meet a variety of conditions. Aid from multilateral lenders such as the World Bank and Asian Development Bank is contingent upon gaining membership into those organizations, which require that an applicant first become a member of the International Monetary Fund. Though these institutions would have to examine the credibility of the particular programs and projects proposed, North Korea could possibly secure hundreds of millions of dollars or more per year in development aid.

Thus, in the initial years, Pyongyang could plausibly expect an annual aid inflow in the range of \$4 billion or more. Even if some of these resources merely replaced current illicit North Korean earnings (e.g., counterfeiting, drug trafficking, and ballistic missile sales), the DPRK could still increase overall import levels by perhaps \$3 billion per year (or double current estimated levels).⁶

These illustrative numbers imply that shortages of economic resources would not be the limiting constraint under such a future regime. On the contrary, the North Korean economy could expect to enjoy a higher level of imports—on both an absolute and a per capita basis—than ever before.

If Pyongyang were to embark upon the path of “reform socialism” first trod by China and Vietnam, greater inflows of aid—to say nothing of private-sector investment—could be expected. Even if the DPRK leadership did not wish to embark upon such a path, however, North Korea's economy would still be in a better position to grow and develop than at any time since the 1960s.

SCENARIO ONE: WHAT IF A BOLD SWITCHOVER?

In this special roundtable Bradley Babson, a former World Bank official, outlines in detail the likely process and requirements that the DPRK would face in an application for membership in the World Bank and other international financial institutions (IFI).⁷ The DPRK government has thus far only been interested in international political agreements that provide an immediate, significant, and unrestricted influx of resources from abroad (e.g., bilateral

⁶ International estimates of North Korean trade are based upon the reports of Pyongyang's trade partners, since the DPRK does not regularly release information on its imports or exports. For a detailed examination of such “mirror statistics” for North Korea, including their limitations and weaknesses, see Nicholas Eberstadt, *The North Korean Economy Between Crisis And Catastrophe* (New Brunswick, NJ: Transaction Publishers, forthcoming).

⁷ The full version of Babson's essay is available at NBR's Northeast Asian Program website ~ <http://nbr.org/programs/northeast/nkbs.pdf>.

foreign aid flows, the Kumgang Mountain tourism deal, or perhaps even the so-called inspection fee for the 1999 visit by U.S. officials to the suspect Kumchang-ri site).⁸ By contrast, preparations to join the IFIs would entail significant obligations for the DPRK and offer little in the way of immediate “payout.” Financial disclosure—not a North Korean strong suit—would be *de rigueur*, as would vastly increased foreign access to DPRK officialdom. Foreign officials would evaluate the North Korean government according to criteria foreign to DPRK decisionmakers, including the quality of the legal system, environmental consequences of policies and projects, and implications for poverty reduction. Babson observes that, following formal membership, IFI lending would likely not commence without careful (and intrusive) project preparation efforts—a process in which lending institutions would insist both upon access to relevant DPRK counterparts and on responsiveness from these counterparts. Loan surveillance and monitoring would be routine in order to ensure that funds were being used solely for the purposes contracted.

Although Babson does not say so explicitly, his essay highlights the need for radical changes in DPRK governmental norms and practices if Pyongyang is to qualify for regular IFI lending. Even if North Korea qualifies, the scale of IFI transfers might not be immense. Babson estimates that, under current conditions, the DPRK might be a candidate for lending from IDA-14 (the World Bank’s most highly concessional window) in the amount of \$25 to \$250 million per year. Additional funds from other IFIs may also be available for the DPRK, as well as through such arrangements as the “special trust fund,” in which donors are permitted to commit funds dedicated to a special and accepted purpose.

SCENARIO TWO: WHAT IF A FURTHER-RADICALIZED SECURITY POLICY?

What if, instead of taking a major step to reduce tensions—and realize the aforementioned economic benefits—North Korea decides to take the much more provocative step of testing a nuclear device? This is the question that Marcus Noland, an analyst at the Institute for International Economics,

⁸ In early 1999, the U.S. government committed over 500,000 tons of food aid for emergency relief in North Korea; the North Korean government has always insisted that this aid was a payment by Washington for permission to visit a suspect underground facility, while the United States has always maintained that the food donation and the inspection were entirely unrelated.

addressed at the NBR conference.⁹ Noland writes that South Korea, Japan, and China are all vulnerable to the “contagion effects” that would be triggered by an extension of already familiar adverse DPRK security behavior.

Noland’s assessment suggests that South Korea, Japan, and China are also vulnerable to “business panics” precipitated by North Korean brinkmanship and aggression.¹⁰ Noland warns, however, that China’s vulnerability could be much greater if Beijing were to align with Pyongyang in the aftermath of a DPRK action so egregious as to invite broad international economic sanctions.

Noland cautioned that deeper and more extensive assessments would be necessary in order to calculate a more precise estimate of the possible impact of DPRK “shocks” on ROK, Japanese, and Chinese trade, investment, output, and employment. After examining analogous security shocks in other global hotspots, however, Noland speculates that even a “scary” North Korean gambit might carry only temporary and manageable economic ramifications for the Northeast Asian economic neighborhood.

Given that further exploration is necessary to quantify the sort of potential economic effects that Noland describes, this essay invites follow-on research. Noland’s outline, however, also points to troubling and immediate policy questions. If the Northeast Asian neighborhood could—at least from an economic standpoint—weather a North Korean nuclear test, then that might also mean that Pyongyang might factor in the region’s economic resilience to any ultimate decision to ratchet up the nuclear drama.

LOOKING TOWARD THE FUTURE

A great deal of additional work regarding the possible economic ramifications of a radical shift in North Korean security policy can be profitably undertaken, both by country-specific research teams and through international coordination. From a policy research perspective, however, foreign aid budgets alone clearly do not provide an accurate measure of the “cost” of North Korean behavior. For North Korea’s neighbors, these costs must also be measured in foregone development opportunities. The toll is likely to be consequential—especially for North Korea’s treaty ally, China.

⁹ In this *Asia Policy* roundtable, Noland examines one possible type of proactive behavior: testing a nuclear device. Other possibilities examined in the full text of his essay are the export of fissile material and nuclear weapons. The full version of Noland’s essay is available at NBR’s Northeast Asian Program website ~ <http://nbr.org/programs/northeast/nkbs.pdf>.

¹⁰ In descending order of vulnerability.

Conventionally framed academic expositions concerning suboptimal arrangements in political economy and public choice tend to portray tension as usually occurring between the foregone economic opportunities of potential but “unvested” beneficiaries and the immediate interests of those stakeholders who profit from current inefficiencies. The proceedings of the NBR conference strongly suggested that none of North Korea’s neighbors face such dilemmas regarding DPRK security behavior; on the contrary, all of these neighboring countries have suffered either immediate costs or lost opportunities for adverse North Korean behavior (albeit of varying magnitudes) and all would benefit economically from an emendation of North Korean security behavior.

Whether the current North Korean government might be willing—or even capable—of taking the economic interests of its neighbors into account is a critical question. In particular, the relationship between North Korea and China merits closer attention for two reasons. First, North Korea has given China cause to become more assertive. Pyongyang has engaged in behavior not only contrary to China’s economic interests but also embarrassing to China’s international stature. These activities include retrenchment of domestic economic reform efforts (initiated by Kim during the summer of 2005) and North Korea’s money laundering through Macau’s Banco Delta Asia. The reported arrest (for either an illegal real estate transaction or for money laundering) and subsequent release the next day of Kim Jong Il’s rumored confidant and chief of staff, Kang Sang-jun, at the outset of Kim’s January 10–18, 2006 visit to China may possibly be an indication of the seriousness with which China is viewing this type of North Korean behavior.

Second, the conduct of Kim’s January 2006 visit suggests further changes may be in the works. During the trip Kim and his 300-member entourage toured vast areas of China and retraced Deng Xiaoping’s famous “southern tour” in an effort to “learn” more about Chinese reforms. There is evidence that many members of Kim’s entourage were associated with Chinese-North Korean joint ventures, enterprises which to date have not met with much financial success. On the last day of Kim’s China trip, in meetings in Beijing with all nine members of the Standing Committee of the Politburo of the Chinese Communist Party, the Dear Leader for the first time offered public and unqualified praise for the Chinese reform model—i.e., domestic reforms and opening to the outside world—and reiterated the DPRK’s commitment to full de-nuclearization. Is it possible that China has undertaken a more active role in encouraging North Korean reforms than has previously been the case?

Regardless of how events continue to unfold in the coming months, this roundtable—and the research from which this roundtable draws upon—has clearly demonstrated that the degree to which the current North Korean government might modify DPRK security and economic policies will carry major ramifications for all those with a stake in Northeast Asian economic development and stability.

Visualizing a North Korean “Bold Switchover”: International Financial Institutions and Economic Development in the DPRK

Bradley O. Babson

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NOTE ≈ *The views expressed in this paper are those of the author and do not necessarily reflect those of the World Bank, International Monetary Fund, and Asian Development Bank, or their Executive Directors and the countries they represent. An earlier version of this essay appeared under the title “Implications of a ‘Bold Switchover’ in Security Policy for Involving the International Financial Institutions in Financing North Korean Economic Development.”*

EXECUTIVE SUMMARY

This essay examines the issues involved in the mobilization of international aid to support any future “bold switchover” in North Korea’s security policy, and assesses possible roles for international financial institutions (IFI) such as the World Bank.

MAIN ARGUMENT

Due to the unique conditions of the North Korean context, any IFI role in that country would require major shifts in the way that the Democratic People’s Republic of Korea (DPRK) currently shares information, develops economic policies and institutional capacities, and works with foreign partners.

POLICY IMPLICATIONS

- If the IFIs are to play an effective role in providing the necessary aid coordination to help the DPRK, then both Pyongyang and the major IFI shareholders will need to exhibit strong political will and shift their present thinking regarding the desirability of IFI engagement.
- DPRK membership in the IFIs would require that Pyongyang adhere to international norms regarding information sharing, conduct in economic relations, and access to IFI resources.
- As an interim step, special trust funds administered by the World Bank—often useful in post-conflict situations—should be considered for North Korea.
- In order to ensure the necessary discipline in setting priorities and coordinating political and developmental aid as steps to reach agreed outcomes, the DPRK should consider the adoption of mechanisms such as the “transition results matrix.”
- The development of a relationship between the World Bank and the DPRK, along with the incumbent coordination of development aid, will need to proceed through a phased process.
- Given the particularities of the North Korean context, political and development aid must be coordinated appropriately to ensure economic rationality and the sustainability of political achievements.

If North Korea (Democratic People's Republic of Korea, DPRK) were to relax its "military-first" policy and transform relations with its neighbors and the international community at large, such a "bold switchover" in security policy would provide both the DPRK leadership and the international community with strong incentives to anchor a new security environment by working to provide significant economic benefits for the North Korean people. The challenges would be enormous, however, and would include managing domestic political economy implications of the policy shift, developing a realistic economic development strategy that would be linked to a military demobilization and redeployment strategy, establishing new working relationships with foreign partners who would provide foreign aid and private investment, and effectively absorbing external finance and technical assistance. Among the first questions to be addressed under such a scenario is whether or not the DPRK would choose to finally become a regular member of the international financial institutions (IFI). Such a move would allow IFIs to play the same central role in policy dialogue, development finance, and donor coordination that they perform in other developing countries.

This essay examines the issues that both the DPRK government and the international community would need to address in their efforts both to mobilize international aid to support transition in the DPRK and to build a future role for IFIs such as the World Bank.¹ The main argument is that, although a potential role for IFIs in North Korea does exist, the unique conditions of the DPRK context would require that any such role be preceded by major shifts in the way that Pyongyang currently shares information, develops economic policies and institutional capacities, and works with foreign partners. The development of a relationship between the World Bank and the DPRK, along with the incumbent coordination of development aid, will need to proceed through a phased process.

This essay is divided into six sections:

- ≈ pp. 14–16 offers a review of the potential role for the IFIs
- ≈ pp. 16–18 discusses three initial steps that the IFIs could take even before gaining access to the DPRK's finances
- ≈ pp. 18–19 sets out the general requirements for the DPRK's membership in IFIs

¹ For a general overview of the needs and challenges for international involvement, see Stanley Foundation, "Future Multilateral Economic Cooperation with the Democratic People's Republic of Korea" (a report on a conference in Berlin, June 15–17, 2005) ≈ <http://www.stanleyfoundation.org/reports/EENK05.pdf>.

- ≈ pp. 20–22 highlights the need for the World Bank to adopt a phased-in approach to building a relationship with the DPRK
- ≈ pp. 22–24 examines the larger issue of coordinating political and development aid in the DPRK context
- ≈ p. 24 draws implications for developing an appropriate support strategy for the World Bank and other donors

POTENTIAL ROLE FOR INTERNATIONAL FINANCIAL INSTITUTIONS IN NORTH KOREA

A bold switchover policy would potentially trigger a dramatic re-allocation of resources in the DPRK economy that would stimulate economic growth through improved efficiency of resource use. Depending on the strategies and policies adopted, however, the costs of transition could be large and the equity outcomes highly uncertain. In order to accomplish a transformation that would put the DPRK economy on a sustainable growth path, North Korea would require both an infusion of capital investment as well as resources for managing the social costs of transition. Because the DPRK's public finance and banking institutions are incapable of mobilizing domestic savings to finance these needs in the short and medium term, Pyongyang will require large-scale external financing through both Official Development Assistance (ODA) and foreign private investment. The DPRK will also need advice and technical assistance to design economic development strategies and policies that will convince donors and private investors that the DPRK is capable of utilizing external assistance and investment appropriately. The resolution of the DPRK's long-standing external debt arrears and improvement of debt management capacity will constitute essential parts of this agenda. In addition to designing future economic development strategies and policies, mobilizing foreign capital and knowledge resources, and building investor confidence, the DPRK will also need help in establishing management capacity and coordinating not only dialogue with donors and investors but also the implementation of projects and programs that are supported by these donors.

The IFIs have the capacity and experience to support the DPRK in addressing these challenges.² The International Monetary Fund (IMF) is particularly important for the future of the DPRK due to the role this

² For a full discussion of the potential roles for the IFIs, see Bradley Babson, "The International Financial Institutions and the DPRK: Prospects and Constraints," University of British Columbia, Institute of Asian Research, North Pacific Policy Papers, no. 9 (2002).

organization can play in helping the DPRK to compile statistical information regarding North Korea's financial condition and economic performance that would be essential in building the confidence of donors and investors. If Pyongyang does not meet the basic requirements of routine and transparent reporting on the macro economy and financial sector, the DPRK will not be able to expand from receiving humanitarian and political aid to being the recipient of development aid and private investment from the international community. The approval of bilateral commitments of ODA for most donors will require a credible macroeconomic framework, and the IMF endorsement of this framework will be one of the major determinants of the willingness of donors to commit large-scale ODA to the DPRK. Similarly, the IMF will play a critical role in the resolution of the DPRK's external debt overhang already owed to the Paris Club. This resolution will be important not only for the DPRK's ability to mobilize future ODA but also in order to improve the country's creditworthiness ratings and investment climate for foreign investors.

The World Bank is also a potentially important partner for the DPRK. The World Bank has global experience both in supporting economic transition from planned to market economies as well as in post-conflict reconstruction and transition from humanitarian to development assistance. Moreover, the World Bank has a history of close relations with South Korea, China, and Russia as borrowers, and with the United States and Japan as the organization's two largest shareholders. Thus the World Bank is well-positioned to work closely with the countries involved in the Six-Party Talks to develop a program of support for the future DPRK under a bold switchover policy. Through the Consultative Group mechanism, the World Bank can not only provide the overarching coordination necessary for a coherent transition and development program from the broader international community, but can also ensure effective coordination both in policy dialogue with the DPRK and in aid mobilization and implementation.

The Asian Development Bank (ADB) will likewise have an important potential future role in the DPRK. Much like the World Bank, the ADB can help mobilize capital for investment and provide technical assistance that will supplement the resources being mobilized both bilaterally and through the World Bank. The ADB has also developed competent sub-regional development expertise, most notably through its successful sponsorship of the Greater Mekong Sub-Region (GMS) initiative. The ADB has already supported regional development activities in Northeast Asia through studies conducted in collaboration with the Tumen River Area Development Program

(TRADP), of which the DPRK is a participating member. The fact that Russia is not a member of the ADB, however, would require that special arrangements be made for the ADB to work together with Russia in a coordinated regional program for the economic integration of the DPRK into Northeast Asia.

INITIAL STEPS

In order for the DPRK to benefit from potential IFI involvement in North Korea, Pyongyang must understand how IFIs would approach the development of a relationship and the types of initial activities that would need to be undertaken before gaining access to IFI financial resources. Initially, the non-financial aspects of the relationship would be much more important, and would focus on the following three areas: training and capacity-building, development strategy and policy dialogue, and pre-investment activities.

Training and Capacity-Building

The DPRK will need to institute a comprehensive program of training and capacity-building. Presumably, the IFIs would contribute to such a program in a number of ways. For instance, the World Bank Institute (WBI) provides a variety of learning services, including designing and delivering courses and seminars, promoting knowledge networks and communities of practice, and providing technical and policy advice. The IMF Institute similarly provides programs for macroeconomic and financial system policy, monitoring, and management, while the ADB Institute promotes research on development models and organizes policy discussions and learning opportunities. Taking advantage of these learning resources would require that the DPRK develop the large-scale capacity to mobilize the participants for both in-country and overseas learning programs, work with the training agencies to design programs tailored to high-priority needs, and utilize the knowledge gained. Coordination with other suppliers of training and knowledge services would also be important.

The innovative programming of the World Bank's Global Development Learning Network (GDLN) provides access to knowledge and experience in the practical aspects of development. If the DPRK government adopts a policy of allowing connections to the international information networks, the GDLN (and the Internet in general) can be a highly effective tool to promote learning for government officials, university students, and business managers. The DPRK government would, however, first need to accept the implications

of exposing a broad spectrum of North Korean society to detailed knowledge of development and business practices in the outside world.

Equally significant would be the transfer of knowledge and experience that comes informally through such cooperative activities as studies and pre-investment preparations by teams of IFI staff working with counterparts from various ministries. These on-the-job learning opportunities at the technical level are extremely important for building working relations, successfully implementing large-scale development projects, and meeting the various requirements of the funding agencies. To be effective, IFI staff would need to have ready access to their counterparts, be permitted to work together in teams to accomplish tasks, and be able to rely upon professional and open relations when problems arise even at the lowest levels of bureaucracy.

Development Strategy and the Importance of Policy Dialogue

Any relationship that the DPRK develops with the IFIs will be greatly strengthened early on by mutual understanding of the DPRK's particular economic and social conditions. This understanding will help to decide which policies would best promote economic recovery and which development strategies would best help the DPRK achieve its goals and objectives in a manner that the IFIs can, in light of their mandates and general policies, wholeheartedly support. Policy dialogue plays a vital role in any IFI action undertaken in support of a country's development. One way this dialogue is accomplished is through joint studies of relevant topics. Such topics typically include needs assessments, public investment and expenditure reviews, sector studies, and seminars related to development planning and management. The breadth of relevant topics implies that the DPRK would need to be able to accommodate groups of experts who would interact with government officials at various levels on policy-related issues. In order to stimulate meaningful and effective policy dialogue, it is essential that a clear framework for decisionmaking across major stakeholder groups within the DPRK is established.

Pre-Investment Activities

IFI lending requires more than just a mutual agreement on development strategies and policies. Pre-investment activities also require assessments of a government's legal system, internal financial management capabilities (including controls over budget planning, budget administration, and audit standards), technical preparation of projects, environmental and social impacts

of proposed investments, preparation of mitigation plans, and the adoption of policies and procedures relating to procurement of goods and services that meet IFI requirements. Because these pre-investment activities span across many different government agencies, managing internal coordination within the government is an essential part of a working relationship with the IFIs (which also need access to all the concerned agencies in the conduct of their work).

GENERAL REQUIREMENTS FOR RELATIONS WITH THE IFIS

The DPRK is not a member of any of the IFIs, and relations between North Korea and such organizations are essentially non-existent. Ever since the food crisis of the mid-1990s, however, the DPRK and IFIs have had sporadic contact with each other. In 1997 the DPRK unexpectedly sent a letter to the ADB seeking to explore the possibility of membership—a possibility that was rejected by the major shareholders. In September 1997 the IMF sent a fact-finding mission to the DPRK and submitted a report of mission findings to the IMF's Board of Executive Directors. In February 1998 the World Bank sent an exploratory mission to the DPRK with the intent of building an understanding of the benefits and requirements of a relationship with the DPRK. Following the inter-Korean summit of 2000, informal contacts led to a formal invitation being issued to the DPRK to participate as a “special guest” in the IMF/World Bank Annual Meetings in 2000. North Korea declined this invitation, however, and direct contacts ceased following the events of October 2002 and the ensuing nuclear crisis.

Two essential requirements would have to be met for a bold switchover policy to benefit relations between the DPRK and the IFIs. First, the DPRK would need to actively participate in the relationship and accept the international norms that would accompany the development of such relations. Second, the shareholders would need to support the free flow of IFI resources, both knowledge and financial, to the DPRK.

An early issue to be addressed in any new relationship is the establishment of communications and counterparts. Both sides need to designate responsibility for managing the development of the relationship and coordinating communications. Individuals also need to be assigned to carry out these responsibilities—a task they cannot fulfill without the allocation of proper resources with which to conduct their activities. There are no fixed rules for the assignment of lead counterpart relationships for countries other than that they be financial agencies. The Central Bank is typically given the

lead role for developing relations with the IMF, and the Ministry of Finance assumes responsibility for multilateral development banks. In order to avoid miscommunication and misunderstandings during the early phases of relationship building, internal communication within both the DPRK government and the IFIs themselves is essential. Education of policymakers, mid-level officials, and technical staff is very important at this early stage. Equally important is control over official communications and approvals by senior officials for actions between the two sides.

To obtain membership in an IFI, a country initially needs to make a formal application, meet the legal requirements for membership, and receive a vote of approval from the boards of governors. In the case of the IMF, this requires at least 85% support from the shareholders. Furthermore, membership in the World Bank must precede membership in the IMF (although processing both applications simultaneously has become common practice). One of the requirements of the World Bank is that a country must first join the International Bank for Reconstruction and Development (IBRD) before becoming eligible for membership in other IBRD organs—such as the International Development Association (IDA), the International Finance Corporation (IFC), and the Multilateral Investment Guarantee Agency (MIGA). In the case of the DPRK, becoming a member of any of these World Bank organs would carry potential benefits. Though joining the IMF before joining the ADB is not a formal legal requirement, in reality the board of governors is unlikely to approve membership for an applicant that has not already been accepted as a member of the IMF. Rules similar to those governing membership applications for the IBRD and IDA of the World Bank also govern access to the ADB Official Capital Resources (OCR) and Asian Development Fund (ADF).

Merely receiving assistance from an IFI, however, does not require membership. If the Boards of Executive Directors were to adopt a resolution stating that the provision of assistance to the DPRK is in the interests of existing members, such assistance could certainly be proffered. In practice assistance of this sort falls into three categories. The first is technical assistance and training designed primarily to help potential members both prepare themselves for the application process and meet the legal and technical requirements for membership. The second is analytical work and technical assistance related to post-conflict recovery and economic reconstruction planning. The third is assistance provided through special trust funds established by donors and the World Bank that require the World Bank to administer the funds and provide other services such as aid coordination.

NEED FOR A PHASED-IN ROLE FOR THE WORLD BANK IN THE DPRK

Even if the DPRK adopted a major shift in security policy and political relations with the international community, it is by no means self-evident that North Korea would be ready to meet the requirements of a full-scale relationship with the World Bank.³ Given the absence of any historical relationship, a process of mutual education would likely constitute the first step. The most logical strategy would be a phased approach in which each stage provides the foundation for an expanded relationship and scale of assistance in the next. A possible sequence might resemble the following model:

- *Phase 1:* Education, training activities, cooperation in a comprehensive economic assessment, and development strategy dialogue.
- *Phase 2:* Establishment of a “special trust fund” to finance a program of high priority training, technical assistance, sector and institutional assessments, and pre-investment studies. An initial donor coordination mechanism should accompany the establishment of the trust fund.
- *Phase 3:* Membership in the IMF, IBRD, and IDA; initiation of an IDA assistance program; and establishment of a consultative group for the DPRK. Membership in the IFC and MIGA would also be appropriate in this phase.
- *Phase 4:* Graduation to IBRD borrowing and support for accession to the World Trade Organization.


The first phase might last one year in duration, whereas the second phase could span three to four years. Phase three could overlap with phase two and last as long as is deemed necessary, with the eventual goal of moving to phase four as soon as performance permits. Given space constraints, this essay will analyze the creation of the special trust fund as noted in phase two.

³ For an in-depth examination of the requirements of any new relationship between the DPRK and IFIs—such as the IMF, IBRD, and IDA—please see the full version of this essay, Bradley O. Babson, “Implications of a ‘Bold Switchover’ in Security Policy for Involving the International Financial Institutions in Financing North Korean Economic Development” (report prepared for a conference sponsored by The National Bureau of Asian Research, March 2006) ≈ <http://www.nbr.org/programs/northeast/nkbs.pdf>.

Special Trust Funds

In recent years a number of situations have arisen in which the World Bank has been asked to establish and manage special trust funds for countries that are emerging from conflict. Special trust funds have been established for such non-member states as the West Bank and Gaza, Bosnia-Herzegovina, Kosovo, and Timor-Leste. More recently, the World Bank has also set up special trust funds for existing members who are facing special circumstances, such as in the Sudan, Afghanistan, and Iraq. These special trust funds are typically established based upon a resolution of the Board of Executive Directors at the World Bank, and operate under rules and procedures formulated for each country on a case-by-case basis. These trust funds pool finances from participating donors and disburse funds in accordance with operational rules, normally on a grant basis. In such cases the World Bank has been appointed trustee of the fund, and a donor council of contributors approves programs for use of the funds. In the case of the Timor-Leste fund, the ADB, working in tandem with the World Bank, has been given an implementing agency role.⁴

The advantage of special trust funds in a post-conflict situation is that they can help bridge the transition from humanitarian aid to development assistance. Through start-up aid for economic reconstruction and development, those funds can help bridge political aid given to improve the security environment and the transition to peacetime. The idea of establishing a special trust fund for the DPRK at an appropriate political moment to facilitate both of these transitions is very appealing. Certainly, any decision by Pyongyang to adopt a bold switchover security policy would be sufficient to trigger a willingness in the donor community to establish such a fund for the DPRK. Though the specific roles and procedures governing the fund would need to be negotiated to fit the special circumstances on the Korean peninsula, such an undertaking would not be particularly difficult. The administration of the fund could likewise be assigned to either an entity created specifically for this purpose or to an existing multilateral organization—such as the UN, UNDP, or World Bank—that could call on experience in delivery special assistance in post-conflict environments. The fact that the World Bank has established special trust funds for other post-conflict situations would seem to indicate that such an arrangement could work for the DPRK as well, especially since the mechanisms for administration, monitoring, and reporting are all well

⁴ For a detailed description of the operations of “special trust funds,” see Chuong N. Phung and Jean François Bauer, “Interim Evaluation of the Trust Fund for Timor-Leste (TFET)” (a report prepared for the European Commission, October 2004)  <http://siteresources.worldbank.org/INTTIMORLESTE/Resources/EuopenComission-EvaluationReport.pdf>.

established. Establishing such a fund would, however, require that the Board of Executive Directors adopt a resolution authorizing the World Bank both to undertake such a responsibility and to develop a working relationship with the DPRK (even if the membership process was still at an early stage).

LINKING POLITICAL AND DEVELOPMENT AID IN THE DPRK CONTEXT

Unless clear and transparent agreements and accountabilities govern the use of all resources available to a government, the fungible nature of money can result in foreign aid of any sort being allocated to other priorities. Moreover, though external aid given to a country may be earmarked for humanitarian, political, or economic development objectives, decisions to extend aid for any of these reasons have consequences both for the economy and the incentives for the major economic stakeholders in determining their priorities and actions. For these reasons, it is important not to focus solely on the motivational frameworks for supplying aid to the DPRK; the goal should instead be to effectively manage an external economic engagement strategy that will accomplish the objectives underlying these motivational equations. Assistance provided to the DPRK during the past decade has tended not to be utilized in a manner consistent with the donor's wishes. Thus any future assistance programs for the DPRK need to be governed by transparent international norms and be based upon coherent policy coordination among the donors.⁵

Any bold switchover in DPRK security policy would likely pave the way for the normalization of DPRK-Japan relations; as a result, a significant amount of politically motivated aid would likely flow into North Korea. Though the chief suppliers of this aid would be those countries involved in the Six-Party Talks, the European Union and other countries (such as Australia and Canada) would likely choose to participate as well. These countries would also be likely to become important future suppliers of development assistance


⁵ For a good analysis of aid and international norms in the DPRK case, see Carol Lancaster, "Foreign Aid and International Norms: The Case of North Korea," in *A New International Engagement Framework for North Korea? Contending Perspectives*, ed. Ahn Choong-yong, Nicholas Eberstadt, and Lee Young-sun (Washington D.C.: Korea Economic Institute of America, 2004), 159–74. For lessons from experience, see Bradley Babson, "Designing Public Sector Capital Mobilization Strategies for the DPRK" (paper prepared for a conference sponsored by the American Enterprise Institute, Korea Economic Institute, and Korea Institute for International Economic Policy, Washington, D.C., February 12–13, 2004), 231–56 ≈ http://www.nautilus.org/archives/pub/ftp/napsnet/special_reports/Babson.pdf.

to the DPRK, both bilaterally and through multilateral organizations such as the World Bank and the ADB.

A scenario in which both political and development aid would flow to the DPRK presents implications worth considering. First, political aid must not undermine incentives for the DPRK to pursue economic reforms and carry out development policies that are in North Korea's own long-term interest. Second, neither political aid nor development aid should undermine the political will that led to a bold switchover in security policy in the first place. The ways in which aid is provided and managed should serve to reinforce the DPRK's political and economic security. Third is that synergies should be exploited between aid that is provided for political reasons and aid that is provided through development assistance based on international norms. This step is particularly critical in the coordination of military manpower redeployment with job creation and new skills training opportunities, the transfer of military assets to civilian economic use, the priorities and policies needed to make best economic use of infrastructure construction that is funded through political aid, and the integration of investments and activities funded by political aid with formulation of a comprehensive economic development strategy. Finally, it is important that bilateral and multilateral aid are well coordinated and that an overall coherence underlies the transfer and absorption of external resources into the DPRK.

A tool that has been developed for other post-conflict situations may be appropriate for the DPRK context. The "results transition matrix" (TRM) is a mechanism for coordinating the planning of activities and assistance provided by donors in a phased manner. TRM, which was developed by the World Bank and United Nations Development Group in collaboration with other donors, is now in use in Haiti, Timor-Leste, Liberia, the Sudan, and Central African Republic.⁶ The TRM aims to accomplish the following four objectives:

- provide a management tool for national authorities to use as a calendar for focusing on key actions
- identify explicitly the links between political-security and economic-social issues
- articulate a compact between the national authorities and the general populace and provide a framework for demonstrating benefits and gains achieved during the transition

⁶ For a detailed description and assessment of lessons of experience, see United Nations Development Group and World Bank, "An Operational Note on Transition Results Matrices: Using Results-Based Frameworks in Fragile States" January 2005  <http://siteresources.worldbank.org/INTLICUS/PoliciesandGuidance/20330632/Operational%20Note%20on%20TRMs.pdf>.

- serve as a catalyst for harmonization among donors, allow for improved donor coordination, and articulate a compact between the national government and international donors

Experience has shown that, by identifying key priorities and balancing comprehensiveness with selectivity, a results-based TRM can help governments manage, discipline, and foster coordination among donors.

CONCLUSION

By combining a phased approach to building a role for the World Bank in North Korea with a TRM supported by donors who provide both political aid and development assistance, it is possible to imagine a viable roadmap for moving forward with a complex and challenging agenda. Such a possibility could only be realized, however, if the DPRK were to adopt a bold switchover policy. Fostering realistic expectations within specific timeframes is critical toward building trust and confidence in new working relationships between the DPRK and foreign partners. To achieve this understanding, high-level discussions concerning the future involvement of IFIs in the DPRK need to take place. Though the World Bank can play a pivotal role in the planning and implementation of such a process, the DPRK must be willing to engage in such discussions, and those holding a major stake in the future of the DPRK and Northeast Asia must support a bold approach to economic and social development as well as to security realignment.

The Economic Implications of a North Korean Nuclear Test

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NOTE ≈ A longer version of this essay, “The Economic Implications of a North Korean Nuclear Breakout,” which explores the impact of a scenario under which North Korea is caught exporting fissile material or a nuclear weapon, can be found at <http://nbr.org/programs/northeast/nkbs.pdf>.

EXECUTIVE SUMMARY

This essay analyzes the economic implications that a North Korean nuclear test would have on Northeast Asia.

MAIN ARGUMENT

A North Korean nuclear test would likely have a negative, though non-catastrophic, economic impact on the region:

- South Korea would likely suffer from capital flight, consequent declines in asset prices and investment, and possibly a minor budgetary loss associated with existing investment guarantees to companies operating in North Korea.
- Japan's economy would also suffer from capital flight, asset price declines, and a reduction in investment. The most radical consequence, however, would be political: a nuclear test might strengthen Japanese attitudes toward re-militarization.
- China would suffer the least direct economic impact, though significant indirect effects could be felt if China's policy toward North Korea became entangled in trade policy tensions with the U.S., the European Union, and Japan.
- Although a nuclear test would create a temporary economic shock within North Korea, concerns over North Korean political stability would keep South Korea and China engaged.

POLICY IMPLICATIONS

- The negative impact a nuclear test would have on the region underscores the importance of international cooperation in solving the North Korean nuclear problem and in deterring Pyongyang from formulating provocative policies.
- Governments with interests in Northeast Asia should prepare cooperative measures that would lessen the economic and political impacts of a North Korean nuclear test.

This paper examines the economic implications of a North Korean nuclear test for Northeast Asia. Traditional wisdom holds that the cross-border effects of an event in one country are usually transmitted to others through trade and financial-market linkages. The simplest route is through direct trade links: an adverse shock to one economy, for instance, can be transmitted to other economies through a reduction in the volume of imports and exports, depressing activity in its trade partners if the trade forgone has no ready substitutes. Trade shocks can also be propagated through exchange rates: an adverse event in one country could cause a depreciation in its exchange rate, thereby conveying competitive advantage in traded-good markets over its rivals (as occurred during the 1997 Asian financial crisis).¹ In such a scenario, direct trade linkages are unnecessary: the output and employment effects could be felt in other countries purely through an erosion of competitiveness in third-country markets.

In recent years, however, it has become apparent that financial-market links may constitute a more rapid and important transmission channel—financial markets react more quickly to events than do markets for goods, and financial-market crises can cause large declines in output (as, for example, South Korea painfully learned in 1997–98). Cross-border capital-market links can take a variety of forms; analogous to the trade case, the most direct method for financial-market events in one country to impact outcomes in others is by directly affecting the volume and composition of their capital flows. During the same 1997–98 Asian financial crisis period, for example, Japanese banks, reacting to financial distress at home, cut lending to other Asian economies.

Equally important, though, is the possibility of cross-border contagion. In this case, investors may abruptly alter their assessment of financial-market risk in one country based upon a perceived similarity to another. Under such a scenario, there is no need for either extensive direct financial-market links (as in the case of Japanese bank lending to the rest of Asia) or trade competition (as in the competitive devaluation case). Herd behavior by imperfectly informed investors, be they foreign or domestic, can exacerbate this phenomenon. The 1997 Asian financial crisis again provides an illustration: a financial crisis in Thailand gave rise to a broader re-evaluation by investors of the risks of investment in Asia, ultimately leading to the withdrawal of capital from those economies and a precipitous fall in asset prices. These shocks in turn helped further depress economic activity throughout the region. Direct financial links

¹ See Marcus Noland, Sherman Robinson, Li-Gang Liu, and Zhi Wang, *Global Economic Effects of the Asian Currency Devaluations* (Washington, D.C.: Institute for International Economics, 1998).

are not required; all that is necessary to generate heightened risk assessments, assets price declines, and capital flights is that investors regard an economy as similar to the problem case.

Viewed from the standpoint of its trade partners, North Korea's direct trade links within the region are so slight that it is hard to imagine a trade shock emanating from North Korea that would have much of an impact on the macroeconomic performance of its partners, though particular firms or localities might be adversely affected.² Yet despite the weak trade links between North Korea and its neighbors, an argument could be made that events in North Korea could have a significant impact on the economies of the region by adversely affected financial markets.

For heuristic purposes, this essay will develop these arguments through a scenario in which North Korea tests a nuclear device. In order to focus on the regional impact of such an action, this essay will assume that all relevant parties have acknowledged the veracity of a North Korean nuclear test. Nor does the essay make any claim as to the supposed likelihood of such an eventuality; a North Korean nuclear test is proffered simply as a narrative mechanism with which to elucidate some of the channels through which North Korea's behavior could reverberate within the economies of South Korea, Japan, and China.

The main section of this essay examines the impact that a nuclear test would have on:

≈ South Korea (pp. 28–33)

≈ Japan (pp. 33–35)

≈ China (pp. 35–36)

≈ North Korea (pp. 36–38)

A conclusion (p. 38) ends the essay.

ECONOMIC IMPACT BY COUNTRY

South Korea

South Korea is the neighboring economy that would be the most vulnerable to a North Korean nuclear test. This vulnerability stems from South Korea's geographic proximity to—and political rivalry with—North

² As will be discussed below, however, the converse—that trade links are too minor to significantly impact North Korea—does not hold.

Korea, as well as South Korea's relatively open financial-markets and recent history of financial crisis. Comparatively intimate links to North Korea mean that financial-market participants are likely to strongly condition any assessment of risk within South Korea with developments in North Korea, while the degree of financial-market openness means that market participants have both the scope and incentive to act on heightened assessments of risk.

During the previous North Korean nuclear crisis of 1993–94, Seoul intervened to support the markets through state-dominated financial institutions; indeed, the stock market actually rose during the crisis. This intervention was, however, in the context of a financial system that embodied pervasive cross-border capital controls, state domination of financial institutions, and scant foreign participation in South Korean financial markets.³

All of these conditions have changed over the past decade. Among the legacies of the 1997–98 financial crisis was the elimination of capital controls that inhibited capital flight by domestic residents during the first nuclear crisis. Today South Korean residents have greater opportunities to move their funds abroad.

South Korean financial firms now use off-balance sheet transactions and financial derivatives—neither of which existed during the earlier nuclear crisis, and were only made possible through the wide-ranging financial-market liberalization that followed the financial crisis of 1997–98. This new development similarly impairs the state's ability to stage-manage financial-market outcomes. South Korea is now the world's busiest market for equity derivatives, with turnover exceeding even the level found in the United States; individual investors account for a large share of trading.⁴ The potential for an uncontrollable panic would appear to be much larger now than during the first nuclear crisis.

Finally, financial-market liberalization has given rise to a vastly expanded role for foreigners in South Korea's financial markets. Foreign investors currently own roughly 40% of the shares on South Korea's stock exchanges. The expanded role of foreign participants and the increasingly complex nature of financial transactions mean that the market is far less susceptible to political intervention today than it was a decade ago.

³ Marcus Noland, *South Korea's Experience with International Capital Flows* (Cambridge, MA: National Bureau of Economic Research, 2005).

⁴ Anna Fifield, "Korea Becomes King of Derivatives Hill," *Financial Times*, January 4, 2006.

Moreover, the popular image of capital flight occurring when foreigners hastily remove their money is belied by historical experience the world over—almost invariably the better-informed locals are the first out the door. In the case of South Korea, the bulk of domestic savings are held by older South Koreans whose views toward North Korea are more skeptical than their children's. Domestic residents were net sellers of equities in the period immediately preceding the inauguration of South Korean president Roh Moo-hyun, who scored poorly with older and more conservative voters—the predominant owners of South Korea's liquid capital.

If an acknowledged nuclear weapons test in North Korea did take place, one could reasonably expect that, at least in the short run, sovereign debt would be downgraded and both foreign and domestic investors would liquidate *won*-denominated assets. Unlike the situation during either the first nuclear crisis or during the subsequent financial crisis, however, the South Korean government could use its huge official reserves—over \$200 billion at year-end 2005—to defend the *won* or prop up local financial markets. While the 1997–98 financial crisis resulted in a substantial opening of the capital account, the safeguard provisions of the Foreign Exchange Transaction Act permit the government to suspend foreign exchange transactions for up to six months in the face of “a critical situation such as a natural disaster, war, drastic change in international or domestic economic conditions or any similar situation”; impose taxes on capital account transactions; and require prior approval for such transactions “when the national economy's balance of payments and international finance face serious difficulty or when the cross-border movements of capital bring about serious obstacles to the execution of economic policies.”⁵

In other words, the South Korean government retains the legal right to re-impose capital controls in the event of an emergency. Whether the government would actually do so in a test scenario is debatable. On the one hand, if a test scenario spurred capital flight and imploding financial markets, the government would come under pressure to act. Yet the re-imposition of capital controls would come at a cost, and would force a new set of policy decisions over when and how to remove the controls, and how to raise the risk premium on investment in South Korea after removal. This last point must be considered within the context of the “Korea discount”—the long-standing, if shrinking, risk premium that is attached to investment in South

5 See Bank of Korea, “Safeguard Measures” ≈ http://www.bok.or.kr/template/eng/html/index.jsp?tbl=tbl_FM0000000066_CA0000001198).

Korea. The country's sovereign debt rating remains below the level it attained prior to the 1997–98 crisis and, despite recent increases in stock prices, South Korean firms continue to trade at a discount relative to other emerging market comparators and other markets in Asia.⁶

South Korean behavior under such a scenario is further complicated by the realization that, though the Bank of Korea would administrate such measures, it is unlikely that the Bank would impose them without the assent of the Blue House. Under the policy of “peace and reconciliation” formulated by President Roh, the South Korean government is committed to engagement with North Korea and has tended to interpret Pyongyang's behavior in a relatively benign light. This diplomatic commitment opens up the possibility that in a nuclear test scenario the Blue House might hesitate to act, fearing that to do so would underscore the significance of the North Korean action and lead to an immediate response from the financial markets. This is particularly salient in the likely situation where rumors of a test would circulate for several days before intelligence services could confirm a North Korean announcement or the North Koreans confirmed the conclusions of foreign intelligence agencies (as was the case during the Pakistani nuclear tests in 1998). By the time the South Korean government acted, the damage would have been done, and the imposition of controls would merely amount to barring the barn door after the horses had already bolted.

Lastly, though the *temporary* imposition of capital controls in response to an emergency should not be of overwhelming importance, such interventions can take on a life of their own. Given the current level of xenophobia in South Korea surrounding the participation of foreigners in the economy, pressure to make permanent any closure (for reasons completely unrelated to North Korea) would be intense.⁷ How such an act plays out would depend largely upon the relative political influence of groups affected by such policies. In an extreme scenario, given the fairly pervasive anti-globalization and anti-foreigner sentiments apparent in South Korea today, one could envision the temporary imposition of emergency capital controls being used as a political

⁶ See Bear Stearns, *StrataGEMS: A Global Emerging Markets Monthly*, December 21, 2005 ~ <http://www.bearstearns.com/bservlet/BSFile?filePath=I60QwqJMFL1BzN9uniyUxjyU2eAWm1M4rjh9l8uSVxtyaMd%2f8%2bw9dA%3d%3d&preview=yes>.

⁷ See, for example, commentaries by Edward M. Graham, “South Korea Should End Its Corporate Xenophobia,” *Financial Times*, August 4, 2005; Guy De Jonquieres, “If Korea Is So Cool, Why Is Seoul in Lather?” *Financial Times*, September 13, 2005; and Wan-soon Kim and You-il Lee, “The Chill Wind of Korean Xenophobia,” *Far Eastern Economic Review*, December 2005.

fulcrum upon which to lever a broader, more permanent reversal of market-oriented reforms in South Korea.⁸

Quite useful would be to work out an accurate assessment of the quantitative implications of this potential scenario for output, employment, and other economic outcomes of interest, both in South Korea and in other countries. The most effective way to simulate such a counterfactual would be to utilize a dynamic multi-country computable general equilibrium model with forward-looking asset markets along the lines of that undertaken by McKibbin and Vines.⁹ Such a model would allow one to increase the risk premium on local financial assets and then trace out the real-side economic implications. Yet even if one had such a model, attempting to specify the magnitude of the shock to be imposed would remain a critical issue. In considering how best to calibrate such potential shocks, two roughly comparable historical benchmarks spring to mind: the 1998 Pakistani nuclear test (to be discussed in greater detail below) and South Korea's own financial crisis in 1997–98. In the absence of a formal analytical model, one might think of these experiences as providing a sort of rough guide to the magnitudes of the effects that one might expect to observe under a North Korean nuclear test scenario.

With respect to the first benchmark, Pakistan's nuclear test was accompanied by the imposition of international sanctions, the suspension of lending by international financial institutions, a 40% decline in the stock market, and a currency devaluation. Though Pakistani asset prices needed more than two and a half years to recover from this shock, they did eventually recover. Note that in January 2006 stock prices were more than six times higher than their pre-crisis levels.

When evaluating this precedent in comparison to the prospective South Korean case, two considerations lead in opposite directions. First and most obviously, Pakistan was the nuclear tester—not the tester's neighbor. As the miscreant, Pakistan was subjected to sanctions; as the neighbor of the miscreant, however, South Korea would not be subject to such sanctions. Hence one would expect that the impact on South Korea would be milder than what Pakistan experienced.

⁸ See Marcus Noland, "From Player to Referee? The State and the South Korean Economy" (paper prepared for the conference "Toward the Second Miracle of Han River," Yonsei University, Seoul, October 12, 2005). For additional polling data, see Pew Research Center, "View of a Changing World 2003," Pew Global Attitudes Project, Washington, D.C., June 2003; and Chang-woon Shin and Young-gi Chun, "Koreans Cast Wary Eye on the World," *JoongAng Ilbo*, October 15, 2005.

⁹ Warwick J. McKibbin and David Vines, "Modelling Reality: the Need for Both Inter-temporal Optimization and Stickiness in Models for Policy-Making," *Oxford Review of Economic Policy* 16, no. 4 (Winter 2000): 106–37.

Yet at the same time, South Korea today is much more integrated into global financial markets than Pakistan was in 1998. South Korea's own financial crisis was traumatic: the stock market fell by 60% over the course of one year (though the market subsequently recovered over the following year), and a collapse in economic growth (from roughly 7% in 1996 to -7% in 1998) was accompanied by a rise in the unemployment rate (from 2% in 1996 to 7% in 1998).¹⁰

Nevertheless, South Korea recovered quickly, if unevenly, and a North Korean nuclear test would not likely amount to a shock as large as the 1997–98 financial crisis. Moreover, the institutional development of the economy in the years since that crisis has been such that the economy could probably absorb financial market shocks with less severe implications for the real economy than during the earlier crisis.

In sum, though the economic implications for South Korea of a North Korean nuclear test are negative, they are not cataclysmic. Such conclusions are necessarily speculative, and—in the absence of a formal model—vague. On the basis of past history, however, one might expect that South Korea would experience a temporary decline in asset prices, investment, and—as a consequence—a modest permanent loss of income. The government would probably find engagement with North Korea on current terms to be difficult politically to maintain. In a narrow budgetary sense, Seoul may lose money on existing investment guarantees provided to small- and medium-sized enterprises that had invested in North Korea. Depending on the extent of capital flight and the government's reaction to such outflows, these effects could be compounded by policy errors.

Japan

The neighboring economy likely to experience the second largest impact of a North Korean nuclear test would be Japan.¹¹ Due to the decline of extensive cross-shareholdings among Japanese corporations and their main bank and *keiretsu* affiliates, Japan's financial vulnerability to North Korea's actions has

¹⁰ Trade information as gleaned from Yahoo Finance, KOSPI Composite Index \approx <http://finance.yahoo.com/q/hp?s=%5EKS11>; and EconStats, Karachi 100 Index \approx http://www.econstats.com/eqty/eqem_ap_15.htm (KSE).

¹¹ In August 1998 North Korea demonstrated unequivocally that it possesses rockets capable of striking Japan's major population centers. Additionally, North Korean propaganda regularly excoriates Japan. Japan would primarily be faced with the implications of the magnitude and persistence of any financial-market shock emanating from a North Korean test.

increased in recent years.¹² Moreover, Japan has witnessed a steady increase in the prominence of foreign investors within its financial markets; foreigners now own roughly 25% of Japanese stocks.¹³ Likewise, Japanese investors have in recent years increased their ownership of foreign securities and, having gotten used to investing in non-Japanese assets, may be more willing than in times past to shift money out of Japan if local financial markets were to receive a negative shock. Together, the unraveling of traditional cross-shareholding networks, the increased role of foreign investors, and the increased willingness of Japanese investors to invest outside Japan not only make it more difficult for the state to coordinate market outcomes but also increase the possibility of capital flight.

At the same time, the government of Japan could use its huge official reserves—more than \$800 billion—to support the market. The Bank of Japan (BOJ) also owns more than ¥2 trillion of Japanese equities, a legacy of an earlier “price-keeping operation” (PKO) intervention in the stock market. By law the Bank cannot sell these equities until September 2007.¹⁴ Were North Korea to test a nuclear weapon, this “overhang” could intensify downward pressure on the Japanese market. Yet the precedent of earlier PKOs means that the government could simply extend the restriction on BOJ disinvestments or authorize additional purchases. Yet, as in the case of South Korea, making and implementing these political decisions would take time, and the market would likely have already rendered its verdict before the BOJ acted. These two contrasts suggest that, though having plenty of resources at its disposal, the government of Japan would likely find itself playing catch-up.

Unlike the South Korean case, however, in which the Roh government remains politically committed to engagement, a North Korean nuclear test would likely harden attitudes in Japan toward North Korea and strengthen political forces supporting re-armament. Any resulting increase in the military budget could be financially beneficial to many firms. Thus while a North Korean nuclear test might contribute to a general rise in risk associated with Japanese assets, depressing asset prices, and investment, particular firms such as those engaged in the heavy industry, aerospace, and high-technology sectors might benefit. Such developments can create their own internal logic and political momentum: military budget increases would contribute to the growth of a

¹² Hideaki Miyajima and Fumiaki Kuroki, *The Unwinding of Cross-shareholding: Causes, Effects, and Implications* (Tokyo: Research Institute of Economy, Trade, and Industry, 2005).

¹³ See David Turner, “Foreign Investors Increase Tension,” *Financial Times*, June 20, 2005; and “Foreign Holdings Up in Japan,” *International Herald Tribune*, November 14, 2005.

¹⁴ See Leslie P. Norton, “Japan’s Bull Run Not Over Yet,” *Barron’s*, December 5, 2005.

beneficiary military-industrial complex that might seek to perpetuate its own existence long after the North Korean threat had disappeared.

The important question concerning Japan is whether one would observe a permanent increase in country risk of sufficient magnitude to generate a macroeconomically significant reduction in investment and ultimately GDP growth. Although such counterfactuals are hard to calibrate, a nuclear test alone, even without further threatening developments within North Korea, probably would not impose permanent economic costs on Japan. The structural changes that such an event might unleash in Japan would probably be of greater interest than the pure macroeconomic impact alone. The possibility of more dramatic threats is taken up below.

China

Of all North Korea's neighbors, China would appear to be the least economically threatened by a nuclear test. Although China is an open economy that relies heavily on foreign investment to fuel its economic dynamism, the government retains extensive capital controls and possesses official reserves approaching \$800 billion.¹⁵ Moreover, the engine of that economic dynamism is located in the coastal regions of southern China, not the rust belt of Manchuria. Assuming that foreign investors could distinguish between Shanghai and Dandong, the direct impact of a North Korean nuclear test might be modest.

A North Korean nuclear test would almost certainly provoke a strong reaction from the United States, Japan, and the European Union (EU), however, and, as was the case during the 1998 Pakistani nuclear test, China's response could emerge as a source of tension. The reaction of the United States, Japan, and the EU could put China on the spot. Although direct trade links between China and North Korea are minimal, China's reliance on the markets of the United States, Japan, and the EU markets is huge. A political dispute that spilled over into trade policy or simply helped sour trade relations with the United States, Japan, and the EU could significantly harm China's economy.

The gravity of such a political dispute is underscored by the observation that, among North Korea's neighbors, in terms of domestic political legitimacy the Chinese government has the least room for maneuver due to the fact that the country's internal social and political stability may in part be tied to the regime's ability to deliver economic growth. Paradoxically, a North Korean

¹⁵ Eswar Prasad and Shang-jin Wei, *The Chinese Approach to Capital Inflows: Patterns and Possible Explanations* (Cambridge, MA: National Bureau of Economic Research, 2005).

nuclear test could thus lead to more profound political reverberations in China than in South Korea or Japan—despite China’s apparently lower direct exposure to negative spillovers emanating from North Korean behavior. Yet such a profound potential impact in China is more speculative than the likely direct effects that could be expected to obtain in South Korea and Japan.

North Korea

Although North Korea remains one of the world’s most autarkic economies in terms of merchandise trade, the country’s exposure to the outside world is considerably higher when aid and unconventional or illicit transactions are considered as well: from a balance of payments standpoint, in recent years North Korea appears to have derived approximately one-third of its revenues from aid, one-third from conventional exports, and one-third from unconventional sources.¹⁶ Remittances come mostly from a community of pro-Pyongyang ethnic Koreans living in Japan and increasingly from refugees in China, who may number close to 100,000.

North Korea’s trade is increasingly oriented toward South Korea, which, in the event of a North Korean nuclear test would probably find it difficult politically to maintain engagement on current terms—terms that embody an element of subsidy or guarantee. Thus, in contrast to the other countries discussed up to this point, North Korea could suffer a noticeable, self-inflicted, and direct trade shock from a nuclear test.

Even though North Korea receives little developmental assistance (as distinct from humanitarian aid) through the multilateral system, the minor programs that do exist would probably be terminated or suspended. Furthermore, any hopes that Pyongyang may have had of gaining entry into international financial institutions such as the International Monetary Fund, World Bank, or Asian Development Bank would be put on hold indefinitely.

A nuclear test would also galvanize diplomatic support among interested countries for Proliferation Security Initiative (PSI)-type enforcement actions and would strengthen multilateral backing for cracking down on illicit activities. Japan, for instance, would almost certainly block remittances to North Korea.

¹⁶ In presumed order of significance, this last category includes missile sales, drug trafficking, remittances, counterfeiting, and smuggling. See Marcus Noland, Statement to Committee on Homeland Security and Governmental Affairs Subcommittee on Federal Financial Management, Government Information, and International Security, “North Korea: Illicit Activity Funding the Regime,” United States Senate, April 25, 2006 ≈ <http://www.iie.com/publications/papers/paper.cfm?ResearchID=629>.

In sum, the negative economic repercussions to North Korea that would result from a nuclear test would be significant. The case of Pakistan during 1998–99, however, suggests that such a shock might not be permanent or even politically debilitating to the regime.¹⁷ In May 1998, immediately following Pakistan's nuclear tests, the G-8 countries imposed economic sanctions that included the termination of bilateral development assistance and opposition to new loans through the multilateral development banks. Facing a balance of payments crisis, Pakistan implemented a number of austerity measures over the next two months. The central bank devalued the rupee, imposed capital controls, and instituted a dual exchange rate. Share prices on the stock exchange fell by 40%. Capital inflows dropped. When the IMF called a halt to new lending, the country obtained a small loan from the Islamic Development Bank. GDP growth slowed markedly.

By July 1998, however, less than two months after the nuclear tests, the United States began to backtrack. In a concession to special interest political pressure, the U.S. government exempted farm products from the prohibition on export credits to Pakistan and indicated that the United States would not veto IMF funding for Pakistan out of fear of a political collapse. Tokyo followed Washington's lead, and the IMF and Pakistan initiated negotiations over a rescue package. In November 1998 the United States waived sanctions (with the exception of arms exports), and the IMF announced that it would resume lending to Pakistan. World Bank and IMF lending resumed in January 1999. Later that same year, General Pervez Musharraf ousted Prime Minister Nawaz Sharif in a bloodless coup.

In short, in less than a single year, Western countries had essentially backpedaled on most sanctions. Although Pakistan's government had been overthrown, the country suffered only temporary economic dislocation. By February 2001 asset prices had re-attained pre-crisis levels and, in the wake of the September 2001 terrorist attacks, the United States waived all remaining sanctions in recognition of Pakistan's cooperation in the war against terrorism and the nation's strategic location given imminent U.S. military action in neighboring Afghanistan. Japan soon followed suit.

The parallels with North Korea are obviously imperfect. The Pakistan case does, however, suggest that sanctioning countries may encounter both domestic and diplomatic motivations to ease such restrictions. In the case of North Korea, China and South Korea would likely be sufficiently concerned

¹⁷ This discussion draws upon case study material developed for Gary C. Hufbauer, Jeffrey J. Schott, and Kimberly Ann Elliott, *Economic Sanctions Reconsidered*, 3rd ed. (Washington, D.C.: Institute for International Economics, 2006).

over the possibility of regime collapse—as was the case with respect to Pakistan in 1998—that Seoul and Beijing would opt to err on the side of forbearance. In any event, recent history suggests that the North Korean regime does not place much priority on popular welfare. Thus one might reasonably conclude that prospective economic repercussions would not pose any hurdles to a North Korean nuclear test.

Chinese policy would be crucial in influencing North Korean behavior. China has been the main loser whenever North Korea has acted provocatively in the past—the August 1998 missile launches over Japan, for example, not only contributed to enhanced military cooperation among the United States, Japan, and South Korea but also strengthened the hands of those in Japan supporting larger defense budgets. Moreover, while the economic costs of a North Korean test would not be enormous, the implications of such an action could stimulate an arms race in Northeast Asia. Because such an event could lead to the advent of nuclear weapons in Japan, Taiwan, and South Korea, these developments would not be in China's best interests.

CONCLUSION

Of all of North Korea's neighbors, South Korea is the most economically vulnerable to destabilizing shocks emanating from a North Korean nuclear test. Provocative North Korean behavior of this sort could provoke capital flight and raise awkward policy issues for Seoul. Even greater provocations by North Korea—such as being caught red-handed exporting fissile material or a nuclear device—would likely trigger reactions by external powers that could ultimately lead to regime change and an abrupt Korean peninsula unification that would carry significant ramifications for both the South Korean economy and others in Asia.¹⁸

Japan is less vulnerable economically than South Korea. Rather than short-term capital flight issues, provocative North Korean behavior could possibly encourage a medium- to long-term process of re-militarization in Japan.

Although China's direct economic exposure to the vagaries of North Korean behavior is relatively slight, North Korean provocations could ultimately carry profound economic and political effects should disagreements over North Korea contribute to a deterioration in China's economic relationships

¹⁸ As discussed in the longer version of this essay, which is available on-line at <http://nbr.org/programs/northeast/nkbs.pdf>.

with the United States, Japan, and the EU—three markets with which China’s continued economic success (and internal political stability) are inextricably linked.

In short, the economic implications that a nuclear test would have on Northeast Asia, though not catastrophic, would not be benign. Furthermore, the threat of adverse economic repercussions is unlikely to pose a significant constraint on Pyongyang’s actions. As a result, even more dramatic proliferation scenarios, in which North Korean behavior does indeed convey large negative economic spillovers to its neighbors, are not hard to imagine. This conclusion merely underscores the importance of cooperation to deter provocative behavior on the part of North Korea.

