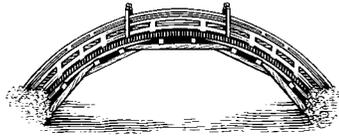


SPECIAL ROUNDTABLE

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



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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=I60QwqJMFL1BzN9unijUxjyU2eAWm1M4rjh9l8uSVxtyaMd%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.iiie.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 ≈ <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.

