Sanctioning North Korea

The Political Economy of Denuclearization and Proliferation

ABSTRACT

Following North Korea's second nuclear test, the U.N. Security Council tightened sanctions. However, North Korea has tilted its relations toward partners uninterested in such measures. Since 2005, it has retreated from economic reform, most obviously in the 2009 confiscatory currency reform. These developments raise doubts about North Korea's interest in engagement.

KEYWORDS: North Korea, economic sanctions, nuclear weapons, missiles, United Nations Security Council

Passage of the United Nations Security Council Resolution (UNSCR) 1874 on June 12, 2009, marks a new phase in the development of the North Korean nuclear crisis. Until that time, the dominant view was that North Korea was probably still engaged in a protracted negotiation. The missile and nuclear provocations of 2006 were followed relatively quickly by the signing of important roadmap agreements in February and October 2007. Similarly, the haggling in 2008 over the parties' respective commitments under these two agreements and the conflict over a verification protocol could be interpreted as tactical moves. Although the last round of the Six Party Talks in December of 2008 ended in a stalemate, the Obama administration was publicly committed to a resumption of the negotiations and a broader strategy of engagement.

Since the missile and nuclear tests of early 2009, however, the mood with respect to North Korea's intentions has turned dourer. North Korea's actions and statements appear to support the hawks' view that Pyongyang is now...
committed to developing and keeping a credible nuclear deterrent. In an early test of the Obama administration, North Korea stated that it would only relinquish nuclear weapons after relations with the U.S. had been normalized. Following the April 5 test of a multistage rocket, the U.N. Security Council (UNSC) issued a presidential statement that moved to implement sanctions under the earlier Security Council Resolution 1718, passed in October 2006 following the country’s first nuclear test. North Korea responded by withdrawing from the Six Party Talks, resuming the reprocessing of spent fuel rods, and undertaking a second nuclear test on May 25, 2009.

Following the passage of UNSCR 1874 in June, North Korea once again escalated by claiming that it would weaponize all recently reprocessed plutonium, commence a uranium enrichment program, and provide a “decisive military response” to any “blockade” against the country. Former President Bill Clinton’s visit to Pyongyang in August to secure the release of two detained journalists provided an opening for the resumption of dialogue. But even optimists foresee protracted negotiations in which the regime will continue to wield its nuclear and missile arsenals as bargaining chips.

There are ample reasons to believe that North Korea’s behavior is driven not by the external environment but by complex domestic developments that include Kim Jong-il’s health, factional struggles over the succession, and longer-run economic changes that have weakened the government’s hold over a fraying socialist system. We should not believe that fine-tuning incentives—in the form of either carrots or sticks—will necessarily succeed; much will depend on developments in Pyongyang as well.

However, whether the five parties (the U.S., China, Japan, South Korea, and Russia) settle on a strategy of increased pressure on Pyongyang, or new inducements, or both, it is important to understand how recent changes in North Korea’s economy may affect these strategies. We make two major points here, one having to do with North Korea’s domestic political economy and the second with its foreign sector. First, there is strong evidence from as early as 2005 that the leadership has become increasingly wary of economic reform.¹ The onset of the nuclear crisis and a more “hostile” international environment clearly do not favor reform, but it is likely that concerns about the government’s weakening control over the economy have also influenced the turn to a more Stalinist economic policy, culminating in the disastrous currency reform of late 2009.

This caution with respect to economic reform has important implications for our understanding of North Korean intentions. General economic inducements, such as the lifting of sanctions, entry into international financial institutions (IFIs), or more formalized regional cooperation, have never been as appealing to the North Korean leadership as proponents of engagement have believed. The regime has always favored targeted transfers that can be directly controlled by the leadership, including food aid, heavy fuel oil shipments, or cash payments such as those secured from the 2000 North-South summit and the Kaesong Industrial Complex (KIC) and Mt. Kumgang projects. In the current environment, the appeal of general economic inducements is even less than it has been historically.

The second, and apparently contradictory, observation is that the North Korean economy has become more open. However, the geographic composition of North Korea’s trade has shifted quite fundamentally. Trade with Japan has virtually collapsed. Trade and investment from Europe stagnated after the onset of the nuclear crisis. Following the inauguration of President Lee Myung-bak, South Korean aid fell sharply as well. At the same time, North Korea’s dependence on China has grown dramatically in both absolute and relative terms. In addition, North Korea has sought out other partners that do not pose sanctions risks, or with whom its nuclear and missile interests are aligned, most notably Iran, Syria, and potentially Egypt.

These shifts in trade patterns make it much more difficult, although not impossible, to pursue an effective sanctions strategy. In the absence of robust cooperation from China, policy would have to target North Korea’s international financial ties or directly interdict trade moving by sea or air. UNSCR 1874 takes some steps in this direction but remains focused overwhelmingly on trade in weapons, and is thus unlikely to be decisive even if implemented fully.

Our discussion proceeds in four stages. In the first section, we provide a brief overview of the development of the North Korean economy from the collapse of the Soviet Union to the onset of the second nuclear crisis.

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Drawing on evidence from a survey of refugees, we emphasize the impact of the great famine of the mid-1990s on what we call “marketization from below,” the tentative policy changes that culminated in the economic reforms of July 2002, and the evidence of retrenchment since 2005.

In the second section, we trace the evolution of the external sector, noting the ongoing ability of the country to finance a substantial current-account deficit and the steady diversification of its foreign economic relations. Of particular interest is the growth in North Korea’s trade and investment with other developing countries, most notably in the Middle East, and the related concerns about proliferation activities.

We then examine in greater detail the changing economic relationship with China and South Korea following important political breakthroughs with both countries in 2000–01. We show the growing weight of China in North Korea’s external economic relations, the increasingly commercial nature of these ties, and the minimal impact of the 2006 sanctions on the growth of China-North Korea trade and investment. These patterns contrast with North Korea-South Korea economic relations, which under Lee Myung-bak have seen a profound reversal from previous engagement strategies.

In the final section, we provide an overview of the sanctions imposed under UNSCR 1874. The resolution sent an important political signal and included several ground-breaking precedents, such as a right to monitor, and perhaps interdict, suspected arms sales and to use financial sanctions against violating entities. Nonetheless, the political compromises required to pass the sanctions through the Security Council limited their substantive, as opposed to signaling, effect. In the absence of complementary inducements and constraints by the five parties, they will have minimal impact.

THE NORTH KOREAN ECONOMY: 1990–2009

Following the collapse of the Soviet Union, the North Korean economy went into a steep decline, culminating in one of the most destructive famines of the 20th century. The causes of this collapse were multiple, including long-run

distortions associated with the socialist growth model and the lost opportunities for reform that resulted from the first nuclear crisis of 1993–94. The failure to adjust to the rapid decline of Soviet support is the principal reason both the industrial and agricultural sectors of North Korea went into a secular decline in the first half of the 1990s. The floods of 1995 were only a final shock.

In response to the crisis, the North Korean economy began to undergo a profound “marketization from below.” Households, work units, local party organs, government offices, and even military units all scrambled for food, venturing into new, monetized economic activities. Markets began to play a more important role, both in generating household income and as a source for retail purchases including food (abetted by the diversion of aid from external donors, primarily the World Food Program [WFP], that began arriving in 1995), and eventually a wider range of consumer goods.

A 2008 survey we conducted of 300 North Korean refugees living in South Korea provides insight into the extent of this process of informal marketization.5 We asked respondents whether, in addition to their regular work, they engaged in other economic activities. A total of 71% said they had engaged in trading, 9% in private services, 19% in “other” business activities, and 15% in August 3 units, entrepreneurial businesses run out of the traditional state-owned enterprises (SOEs). A surprising 69% of all respondents said that they secured over half their income from private business activities, and 46% said they secured all of their income from private activities. These results were mirrored on the expenditure side. Less than 10% of the respondents in our survey said that their primary source of food at the time they left North Korea was the state-run public distribution system (PDS) or their work places. Moreover, there is little difference in this response across different dates of departure; if anything, reliance on the market appears to have gone up over time.

During the famine and its immediate aftermath, the regime had little choice but to acquiesce in these developments. In 1998 the leadership introduced constitutional revisions that tentatively broadened the space for economic activity outside direct state control.6 External political developments provided some additional hints of an economic opening; these included the


2000 North-South summit, the resumption of high-level visits with China in 2000 and 2001, and the Koizumi summit with Japan in 2002. These important diplomatic developments appeared to confirm that political engagement and economic reform were complementary. A relaxation of tensions provided space for the domestic reform effort, and a greater focus on the necessity of reform also motivated the leadership to broaden its foreign political and economic relations.

The regime effectively ratified these developments with a set of policy changes announced in July 2002. There are ample grounds for criticizing this reform as a limited and flawed effort. Nonetheless, it allowed the continued growth of controlled markets and began or continued incremental reforms of the cooperatives (for example, by reducing the size of work teams) and of SOEs (for example, by granting greater managerial autonomy).

Yet, the timing of the reform proved highly inauspicious. Within months of the launching of the 2002 reforms, the second nuclear crisis had broken. An internal debate over the merits of reform continued through 2005, primarily in the form of controversy over the weight that should be given to the military and heavy industrial sectors, as opposed to light industry and agriculture. However, by 2005 signs had begun to emerge that hardliners were winning the policy battles. We consider briefly five examples of “reform in reverse”:

- Developments in the food economy, including efforts to revive the PDS;
- The restrictive response of the government to the development of markets;
- The management of border trade;
- Government statements with respect to overall development strategy, most notably in the joint New Year’s editorial of 2009;
- The 2009 currency reform.

The Breakdown and Reconstitution of the Public Distribution System

Prior to the famine of the mid-1990s, the government set production quotas for the cooperatives, provided farmers with rations at the time of the harvest, and distributed food to urban residents at nominal prices through the PDS.

Markets played virtually no role in the allocation of grain. During the famine, the PDS broke down, and households relied on the market, barter, private farming, and other private activities such as foraging. The influx of foreign aid in the late 1990s provided the basis for a partial revival of the PDS because donors had no independent channels for distributing food. But the process of marketization continued apace, driven by partial reforms in the food sector, such as allowing some private plots and expanding the role of farmers’ markets, as well as the diversion of food aid and cooperative output into the market and growing commercial trade in food across the Chinese border.

In August 2005, the government decided to counter this trend toward marketization by reinstating the PDS (as of October 1) and banning private trading in grain. As in the past, the ability of the government to implement this policy varied across the country, and eventually it was forced to quietly shelve the policy. But such moves intensified again in the wake of floods in 2006 and particularly 2007. First, the government increased production quotas for the next crop cycle, including through exactions earmarked for the military. Second, officials began to crack down on “embezzlement” and “corruption” on the part of cooperative managers. Third, new restrictions were placed on private plots and cooperative leasing of land, in an effort to redirect effort back into cooperative work.

Through a reconstruction of aggregate food balances, an analysis of prices, and direct observation by nongovernmental organizations (NGOs) and U.N. WFP observers, we now know that the food situation in North Korea was more precarious in 2008 than at any time since the famine. These shortages help explain the willingness of the North Korean government to engage in negotiations over a large food aid package with the U.S., concluded in May 2008. The shortages may have influenced Pyongyang’s willingness to negotiate over the broader nuclear issues as well. But in other respects, the 2007–08 crop cycle showed a continuing preference for controls and limits to engagement, most clearly visible in the decision in May 2009 to terminate the 500,000 metric ton food aid program with the U.S.

Responding to Markets and Traders

The breakdown of the PDS and the emergence of markets pose important challenges for the North Korean government, not only vis-à-vis the countryside but in the urban and industrial sectors as well. These included a fall in real wages and the migration of labor out of the state sector and into market activities, and the corresponding weakening of the SOE sector. North Korea’s food problems have increasingly come to resemble those in market economies, in which incomes, rather than political position, are the determinants of hunger and malnutrition.

Recent initiatives have not been limited to food but have included a wider assault on market activity, culminating in the 2009 confiscatory currency reform. This campaign began with the imposition of escalating age restrictions on market traders in the fall of 2007, ultimately banning men and women under 50 from trading in general markets in an attempt to force the “able-bodied” back into employment in state-controlled entities such as SOEs. From mid-January 2008, the government stepped up inspections of the general markets (jangmadang), in an effort to control the range of goods offered. The apparent intention behind this effort was reversion to the more-limited farmers’ markets that were permitted to trade only in supplementary foodstuffs. In October 2008, North Korean authorities issued a decree through local commerce management offices around the country ordering all permanent markets to open only once every 10 days. There have also been periodic reports of efforts to control prices. Even prior to the currency reform, control efforts intensified, with bans on a variety of foreign products that have been increasingly important to the burgeoning retail trade.

There is also evidence that the efforts to exercise control over markets extended to cross-border trade as well. The 2004 and 2007 revisions of the criminal code appear to place substantial weight not only on economic crimes in general but on violations of foreign exchange and trade controls in particular. Larger trading entities in the land ports along the border, particularly in Sinuiju, have fallen under government scrutiny.\[^{11}\] In a noteworthy development in April 2008, the central government dispatched a team of

200 investigators to Sinuiju in the name of an Antisocialist Conscience Investigation to inspect the books of foreign trade organizations.

Prior to the currency reform, there was scant evidence of overt social or political backlash; the barriers to collective action in North Korea are well known. But a March 2008 episode in Chongjin suggested that the markets themselves could become the locus of protest and everyday forms of resistance. City officials had sought to enforce the age restriction on female traders. In what appeared to be a coordinated action across several markets in the city, large groups of women staged protests against the ban on trading on March 4. Municipal authorities took the unusual step of reopening the markets under the authority of the local ministry of labor on March 5 but were subsequently compelled to enforce the ban at the insistence of the central government. The episode reveals the complex pressures on local officials squeezed between the dictates of Pyongyang, the absence of resources, mounting political and social pressures, and the risks of further repression.

The Border Problem

The dramatic increase in trade with China has resulted in the creation of dense business networks that include major Chinese and North Korean enterprises, smaller Chinese and North Korean businesses, and North Koreans with relatives in China who are permitted to travel. As a result, the border poses profound challenges to the North Korean leadership. When economic circumstances deteriorate, the incentives rise for North Koreans to move into China, either permanently or in search of business opportunities and food. With this movement comes the gradual breakdown of the government’s monopoly on information about the outside world. Moreover, cross-border trade has come to include an array of communications and cultural products that directly undermine the government’s monopoly on information: from small televisions capable of receiving Chinese broadcasts in border areas to South Korean videos and DVDs and even mobile phones.\textsuperscript{12} The border also poses a variety of more-direct economic problems. Illicit border trade in drugs, particularly methamphetamines, has been widely reported as has the smuggling of scrap metal and other products that reflect the looting of SOEs and public infrastructure.

\textsuperscript{12} North Korea has made several attempts to introduce cellular services on a limited basis. The most recent involves a joint venture with the Egyptian firm Orascom Telecommunications, which is now providing services in Pyongyang. See Marcus Noland, “Telecommunications in North Korea: Has Orascom Made the Connection?” \textit{North Korean Review} 5:1 (Spring 2009), pp. 62–74.
Prior to changes in the North Korean penal code in 2004, a person who illegally crossed a “frontier of the Republic” faced a sentence of up to three years in a political penal labor colony. Those who did not appear politically dangerous were sent to village- or unit-level labor camps, where they would spend between three months and three years in forced labor. Those classified as “political offenders” faced more severe penalties, including indefinite terms of imprisonment and forced labor, confiscation of property, or death. Regulations under the 2004 penal code appear to have codified the differential treatment between economic refugees and those cases deemed political, stipulating lighter sentences for those crossing for economic reasons, although legal revisions did not necessarily reflect the discretion exercised by officials.

The recurrence of severe food shortages following the floods of 2007, however, was accompanied by a dramatic crackdown on border movements. Beginning that November, reports from North Korea began to indicate the organization of Antisocialist Conscience Investigation Patrols to control internal movements in North Hamkyung Province and to confiscate “contraband.” The most dramatic signal sent by the regime was the public execution of 15 people, 13 of them women, in Onsung on February 20, 2008, on charges of trafficking. Lesser sentences have also been increased: single border crossings not related to South Korea or without political overtones that were previously overlooked now carry sentences of three years. Those found guilty of multiple crossings—even if not political—can receive sentences of up to 10 years. In an interesting signal of the seriousness attached to this issue and concerns about the pervasiveness of corruption along the border, the police have been granted new authority to incarcerate without going through prosecutors, and to exercise some control over border security agents and even military personnel.

**Economic Strategy: The January 2009 Joint Editorial and the Return to Chollima**

At roughly the same time that the leadership introduced the concept of military-first politics (*songun*), it also rolled out the goal of creating a “strong and prosperous nation.” This nationalist concept is plastic enough to accommodate a variety of means for achieving it, and it could even be an ideological instrument for the introduction of reforms. However, the 2009 New Year’s joint editorial, a crucial document setting the general outlines of policy for the year, suggests that *songun* signalled a return in the short-run to an

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earlier tradition of mobilizational campaigns. A central theme of the editorial is a celebration of the 1950s Chollima Movement in May, the government announced a “150-day campaign.” The editorial directly quotes Kim Jong-il, an indication of the centrality of the point: “The whole country and all the people, as in those years of bringing about a great Chollima upsurge after the war, should launch a general offensive dynamically, sounding the advance for opening the gate to a great, prosperous and powerful nation, united closely around the Party [i.e., the Workers’ Party of Korea] with one mind and purpose.”

With respect to sectoral priorities, the editorial leads with the metal industry as “the mainstay of our independent socialist economy” and gives pride of place to other heavy-industry sectors, including machine building and chemicals. Of particular interest is the role that the military is seen to play in this process, not only as defender but as a strategic sector. Such a strategic focus is by no means limited to supplying the North Korean military but also seeks to upgrade North Korea’s status as an arms exporter.

The Great Confiscation: The 2009 Currency Reform

On November 30, 2009, the government introduced a surprise confiscatory currency reform. Residents were given one week to exchange limited amounts of their existing currency for newly issued notes. The move set off panic buying, with the prices of staples such as rice and corn rising 6,000%–8,000% and the black-market value of the won collapsing. A month later authorities banned the use of foreign currencies.

The government has not been coy about its intent: to undercut the market and reassert state control. Earlier in August, Kim Jong-il’s sister, Kim Kyong-hui, telegraphed the move in an essay extolling the superiority of central

15. A worker honorific incentive system, the Chollima Movement, named after a winged mythological horse that could travel 250 miles a day, was introduced in 1956. A smelter worker named Chin Ung-won was promoted as a model worker, upholding the policies of the state, strengthening collective life, and generally attaining lofty ideals. See Noland, Avoiding the Apocalypse.
17. KCNA, “Joint New Year Editorial Issued.”
planning over the decentralized market—even trashing the notion of giving enterprise managers greater autonomy in the context of a socialist economy. This basic motive—to crush the market and strengthen direct state control—was confirmed by central bank statements immediately after the reform.

But the policy, which was supposed to constitute the political coming-out party of expected heir Kim Jong-eun, unleashed extraordinary, though sporadic, protests. These appear to have been relatively small and uncoordinated, but the government backtracked, raising conversion limits, providing supplementary wages to some workers, and allowing markets to reopen. In February 2010, an unprecedented apology to the public was delivered by Park Nam-ki, the policy’s reputed architect, and Premier Kim Yong-il. Park was subsequently reported to have been executed or sent into internal exile for re-education. Although the signal of greater accountability could be welcomed, Park’s scapegoating may have been less related to the particulars of the policy mishap than to its self-inflicted nature, nakedly inconsistent with the regime’s ascription of all ills to foreign “hostile forces” and the episode’s potentially damaging implications for an expected third-generation hereditary succession.

The state’s response to these developments has not been reassuring. Park’s replacement is an octogenarian, Yun Gi-jeong, known primarily as a confidant of founding leader Kim Il-sung. The political police have been bureaucratically elevated and placed directly under the National Defense Commission, from where Kim Jong-il runs the state. It is doubtful that the various efforts at control that we have described can ultimately succeed. As long as the state is unable to provide basic necessities, regulated markets—and efforts to close them—will give rise to “alley markets” that shift trading to new venues, or other efforts at circumventing controls. Inspectors can be and are bribed. However, these policies, and particularly the currency reform, have increased transaction costs. Four months after the currency reform, prices remain 600%–800% above their pre-reform levels, despite the contraction in the money supply.

DEVELOPMENTS IN THE EXTERNAL SECTOR

Paradoxically, as the government was slowing or reversing reforms, the economy was becoming more open. Both exports and imports declined precipitously in the first half of the 1990s, bottoming out around 1998 (see Figure 1). Since that time, trade has shown a steady recovery, growing
without interruption through the onset of the second nuclear crisis, though not attaining 1990 levels until 2007. This expansion of trade has been accompanied by significant changes in the nature of North Korea’s foreign economic relations. A first point to note from Figure 1 is that imports consistently outstrip exports: the country has run a current-account deficit over the entire period, implying offsetting capital inflows. Prior to the political developments of the early 1990s, these deficits were effectively financed by aid from North Korea’s socialist patrons. However, first the Soviet Union and Russia, and then China, largely abandoned trade at friendship prices. As a result, North Korea’s trade with Russia almost completely collapsed. Aid has continued to play some role in financing North Korea’s current-account deficit, including ongoing assistance from China as well as multilateral and bilateral food aid. But anecdotal evidence suggests that foreign direct investment has played an increasing role in financing North Korea’s current-account deficit over time, both through the KIC and through a variety of projects with Chinese and other investors.\(^{19}\)

Trade has not only grown, but the political geography of North Korea’s foreign commercial relations has shifted importantly since the onset of the second nuclear crisis in 2002. Establishing this fact is by no means straightforward; data on North Korean trade flows are available from a variety of sources, but they exhibit substantial discrepancies. These difficulties are compounded by the existence of sub rosa trade in weapons and contraband, as well as the fact that some of North Korea’s trading partners do not report trade data either: Iran provides a noteworthy example.

With these caveats in mind, we have taken a fairly simple approach that seeks to provide a snapshot of North Korea’s trade relations since the onset of the nuclear crisis by focusing on its top 10 trading partners for 2004–07. We rely primarily on data from the KOTRA but supplement it with data from the IMF and the U.N. As with all such exercises, the results should be treated with an appropriate degree of caution.

Several patterns stand out (see Table 1). The first is a high and growing dependence on developing countries. Particularly noteworthy is the growth of trade with a small sample of Middle East countries (Algeria, Saudi Arabia, and Lebanon); trade with these countries has grown roughly twice as fast as North Korea’s trade with the rest of the world (Figure 2). The index likely understates the true growth of trade with the region and does not capture investment relations that appear to be emerging. In particular, the Egyptian conglomerate Orascom has entered into contracts for investment worth more than $500 million, which would make it the largest non-Chinese non-South Korean investment since the end of the Cold War.


21. These sources are the KOTRA, “2007 Trends in North Korea’s Foreign Trade”; IMF DOTS; and the U.N. COMTRADE. There are a number of countries that KOTRA has chosen to omit but for which we believe the trade figures reported by the IMF and the U.N. are plausible. We have also investigated those cases in which either absolute trade or the discrepancies between KOTRA and the IMF data are large—over $10 million—by considering the commodity composition of trade using COMTRADE data; these data allow us to eliminate some trade that appears anomalous.

22. Noland, “Telecommunications in North Korea.”
### Table 1. North Korea’s Direction of Trade: Top Ten Trading Partners, 2004–2007 (%)

#### North Korean Imports

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<td>10. Saudi Arabia</td>
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#### North Korean Exports

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<td>6. Qatar</td>
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<td>7. Saudi Arabia</td>
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<td>1.9</td>
<td>1.3</td>
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Source: Ibid. to Figure 1.

This finding about the Middle East is even more striking given that a number of countries that have documented trade in arms with North Korea report no trade at all, including Iran, Syria, and Yemen. It is precisely with these countries that North Korea has been engaged in proliferation activities, ranging from some role in the construction of a nuclear reactor in the Syrian desert, to missile sales, to murky “service contracts” with a range of countries in conjunction with arms exports. Topping the list of these purchasers since the onset of the second nuclear crisis are Iran, Syria, Yemen, and Vietnam,
but the appearance of Myanmar on the list of top-10 recipients of North Korean exports is also of interest.23

A second set of developments concerns North Korea’s trade with its Northeast Asian neighbors. Japan’s reaction to the onset of the nuclear crisis is clearly visible in the sharp decline in its trade with North Korea. In 2004, Japan accounted for 3% of North Korea’s imports and took fully 11% of its exports. By 2007, trade had dropped to a trickle. By contrast North Korea’s reliance on China and South Korea has grown. However, the nature of trade with these two partners has shown very different patterns, as can be seen by examining them in more detail.

North Korea-China Trade

North Korea’s trade with China during and immediately after the great famine bore important similarities to the process of marketization from below, described above. Not only did work units and households engage in domestic trade in order to secure food, but those with access or proximity to the border also initiated new trading relationships with China.

Viewed from the North Korean side, these trade relations ranged from officially sanctioned trade conducted through state-owned trading

companies to transactions that exploited family connections with the Korean Chinese community in the Chinese border provinces. In between these two ideal types of official and private commercial interactions has been a very wide gray area of trade that appears to have a strong commercial component, even if it is conducted by SOEs.

Viewed from the Chinese side, we have data from 2003 through 2007 (excluding 2004) on the share of trade accounted for by firms of different ownership: private, state-owned, or foreign-invested enterprises (i.e., multinationals) (Figure 3). In 2003 less than one-quarter of China’s trade with North Korea passed through private companies and none through multinationals. In 2007 more than half the trade was through private Chinese companies, and multinationals accounted for roughly 10%. In short, trade across the Chinese border is increasingly commercial in form. Further indirect evidence of the commercialization of China-North Korea ties is the sharp increase in North Korea’s exports to China. This increase would be consistent with declining tolerance on the part of private Chinese firms for arrears, and corresponding pressure on North Korean firms to earn foreign exchange in order to finance imports.

Trade has expanded steadily since the onset of the nuclear crisis (Figure 4). If our assumption of increasing commercialization is correct, then trade growth is no doubt explained in no small measure by China’s booming

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**Figure 3.** China-DPRK Trade by Chinese Firm Ownership (in US$ millions)


economy. However, the growth in trade with China may also have been given an unintended boost by the onset of the nuclear crisis. On the one hand, the crisis resulted in an effective Japanese embargo and U.S. financial sanctions on Banco Delta Asia that interrupted North Korea’s commercial relations. On the other hand, China’s de facto strategy of engagement with North Korea persisted, providing an implicit framework for closer economic integration. A more sophisticated statistical analysis of trade during this period shows that North Korea’s 2006 nuclear test and the imposition of Security Council sanctions had no perceptible effect on North Korea’s trade with China. This finding has important implications for the likely outcome of the current sanctions program if it is not supplemented by additional measures.24

Exports to North Korea have also outstripped imports from it, implying a bilateral trade deficit financed in part by growing foreign direct investment by Chinese enterprises. It is interesting to note that despite its proximity to China and the obvious complementarities that would come from deepening the bilateral relationship, the North Korean regime has been unwilling or unable to pursue the export-processing zone model with China. To explore some of the constraints on foreign direct investment in North Korea, we conducted a survey in 2008 of 250 firms from the Chinese border provinces doing business in the North (as well as a control group of enterprises not doing business there). Although most of these companies were engaged only in trade, 70 claimed to have some form of investment in North Korea. We asked them a series of questions about the constraints on their businesses. Not surprisingly, the quality of infrastructure figured prominently in their responses: 92% of investors agreed or strongly agreed that the quality of basic infrastructure was a problem for their business, and 94% agreed that the ban on cell phones was a constraint.25

Yet, property-rights concerns also figured prominently. Sixty-five percent of respondents agreed or strongly agreed that it is risky to invest in North Korea because assets may be expropriated outright. A total of 77% said that regulations there make it hard to do business, and 81% said it was dangerous to invest because the government can change the rules. Fifty-four percent of

25. Cell phone usage, which has never been extensive in North Korea, was banned following the 2004 train explosion at Ryongchon, which was thought to be possibly an assassination attempt on Kim Jong-il, triggered by a cell phone. Cell phone service was introduced to Pyongyang in 2009 through the joint venture with Orascom.
all firms doing business with North Korea said that it was necessary to bribe officials to do business; however, among investors this share rose to 73%, underlining the vulnerability of investing as opposed to trading. These bribes are not trivial: 53% of investors claimed that they spent more than 10% of annual income on bribes. Although the North Koreans have accommodated substantial inflows of Chinese investment, our survey suggests that these relationships have not served to socialize the regime to international commercial practices. Rather, they have been undertaken by SOEs and cemented through corruption.

North-South Trade

North-South trade did not begin in earnest until the initiation of the Sunshine Policy under Kim Dae-jung in 1998. But even following the summit of 2000, North Korea proved reluctant to negotiate legal protocols to govern bilateral trade and investment. Trade remained relatively flat through the end of the Kim Dae-jung administration, before beginning a more erratic expansion under Roh Moo-hyun (see Figure 5). However, it is important to underscore that this inflection was driven in no small measure by aid and the construction of the two major investment projects at Kaesong and Mt. Kumgang; exports from Kaesong did not even begin until 2005.

Despite the Roh administration’s reputation as a relentless advocate of engagement, trade was interrupted by the missile and nuclear tests of 2006 before taking off in 2007 following the resumption of the Six Party Talks and the location of more enterprises in the KIC. At the October 2007 summit, the outgoing Roh administration outlined an ambitious set of economic cooperation projects, promises that the North Koreans viewed not as the product of a particular administration but as a binding bilateral commitment.

The election of December 2007 fundamentally changed the nature of North-South economic relations. The Lee Myung-bak administration moved toward a more conditional concept of engagement, in which expanded trade, investment, and even humanitarian assistance would follow rather than lead progress on the nuclear question. Nor was this commitment altogether disingenuous; even in the wake of the freeze in bilateral relations over the course of 2008, the Lee administration nonetheless budgeted nearly $1.2 billion for inter-Korean cooperative projects for 2009. But by mid-year, virtually none of this money had been spent, owing to the deterioration in diplomatic relations.
FIGURE 5. South Korea’s Trade with North Korea, 2001–2009 (in US$ millions)

It is important to note that from the beginning, North-South trade has had a strong aid and noncommercial component. The Mt. Kumgang tourist project and the KIC have involved private companies but also substantial government subsidies. These subsidies are of particular interest in the KIC case because export-processing zones typically involve concessions and support on the part of the recipient country, rather than from investors.\footnote{Through its Inter-Korea Cooperation Fund, the South Korean government initially offered companies entering Kaesong low-interest loans; virtually, all firms initially entering the zone took advantage of this support. The government also provides political risk insurance covering financial losses up to 90\% of a company’s investment, up to five billion South Korean won ($5.4 million). In addition, a law passed in April 2007 allowed South Korean small- and medium-sized enterprises (SMEs) operating in the KIC to access supports, such as preferential finance programs, extended to SMEs in the South.}

Figure 6 divides South Korea’s exports to the North into three categories—commercial trade, cooperation projects (primarily Mt. Kumgang and the KIC), and noncommercial trade or aid—and compares them with our estimates of Chinese aid. Between 1995 and 2007, South Korea’s aid and economic cooperation activities together have at times accounted for almost 60\% of total trade and have averaged more than 40\% of trade over this period. Aid and other noncommercial exports from South Korea have increasingly outstripped even our highest estimates of Chinese aid. Under the government of President Lee, the relative magnitudes of these noncommercial transactions have decreased as South Korean policy emphasized a more conditional approach. Nonetheless, the irony is inescapable: up through the Lee Myung-bak administration, South Korea’s trade with the North has been less commercial in nature than North Korea’s trade with China.

Both the Kim Dae-jung and Roh Moo-hyun administrations argued that economic engagement was a means to leverage reform in North Korea. Yet, the fact that commercial trade and investment outside of Kaesong was circumscribed meant that the project came to have substantial political as well as economic significance for the South. Despite pressures to respond to the 2006 missile and nuclear tests by reexamining the KIC, the Roh administration chose to largely insulate this experiment from high politics. The Lee Myung-bak administration initially followed suit, despite a more conditional approach to other aspects of the North-South relationship.

North Korea has not shown similar restraint. As a result, the politics of the KIC exhibit what might be called “reverse leverage”: rather than the KIC moderating North Korean behavior and encouraging the spread of reform,
Figure 6. China and South Korea Aid and Exports to North Korea (in US$ millions)

Source: Korea Institute for International Economic Policy (KIEP), North Korean Reliance on China (Seoul: KIEP, 2005).
Pyongyang has sought to manipulate South Korea’s high sunk costs in the KIC to pressure the Lee Myung-bak administration. North Korea’s so-called December 1 actions of 2008 suspended train operations and tourism, closed an economic cooperation office, and ordered the South to withdraw half the staff of the KIC Management Committee. Specific political concerns were cited, including the Lee administration’s unwillingness to fulfill promises made at the 2000 and particularly the 2007 North-South summits. There were also concerns about anti-regime leaflets spread via balloon by South Korean activists.

In March 2009, North Korea took its first steps to rewrite rules—and extract rents—by enforcing environmental standards and levying fines for labor violations. The effective shutdown of the KIC in March was a side effect—perhaps even unintended—of the suspension of an inter-Korean military communication channel in response to U.S. military exercises. But by May, North Koreans were declaring existing contracts with respect to land rent, land-use taxes, and wages null and void. Although North Korea subsequently moderated these demands, the incident revealed the precariousness of the regime’s commitment to the project and its ongoing willingness to make substantial economic sacrifices for political purposes.

THE U.N. SANCTIONS AND THEIR LIMITS

Following the nuclear test of October 2006, the U.N. Security Council announced sanctions that targeted major weapons systems and luxury goods (UNSCR 1718). Yet, as noted above, there is no evidence that either the test or the sanctions had substantial effects on North Korea’s trade with China. Relatively rapid resumption of negotiations on U.S. financial sanctions paved the way for agreements in February 2007 that opened a nearly two-year cycle of Six Party Talks, which ended inconclusively at the very end of the Bush administration’s tenure in December 2008.

UNSCR 1874 of June 12, 2009, goes beyond UNSCR 1718 in both the scope of products covered and particularly in the means of enforcing the sanctions. As with the earlier resolution, UNSCR 1874 calls on North Korea to

cease and desist development of its nuclear and missile programs and to return to the Six Party Talks, the Nonproliferation Treaty, and the International Atomic Energy Agency (IAEA) safeguards.

With respect to product coverage, the new resolution extends sanctions beyond major weapons systems, products related to the production of weapons of mass destruction (WMDs), and luxury goods to include all arms-related trade and all training or assistance related to it. The latter is particularly important because North Korea not only exports weapons systems but has recently engaged in various forms of collaboration on both missile and nuclear technologies, including with both Iran and Syria.

It is important to underscore that the resolution does not constitute a trade embargo on North Korea, nor does it even target nonmilitary commercial trade. The resolution does contain one general sanction not related to arms trade: it calls on both international institutions and member states not to undertake new grants, financial assistance, or concessional loans to North Korea and asks that they maintain “vigilance” with respect to current aid programs. For the most part, however, the sanctions are highly targeted around weapons-related activities, and humanitarian assistance and support for denuclearization are also specifically excluded from coverage.

The most interesting features of the resolution have to do with means of enforcement. In 2003 President George W. Bush launched the Proliferation Security Initiative (PSI), a loose effort to secure international cooperation in monitoring and interdicting ships that might be trafficking in WMDs or WMD-related materials. The new Security Council resolution comes close to making the PSI a formal multilateral effort. The resolution “calls upon” but does not require member states to inspect all cargo on their territory, including at seaports and airports, if it is believed to contain prohibited items. Moreover, the resolution authorizes members to inspect vessels on the high seas or to escort them to port if there are reasonable grounds to believe that they are carrying prohibited cargo. It also precludes the provision of bunkering services to any ship suspected of prohibited trade, placing an additional constraint on any suspect ship.

30. Ibid., Paragraph 10.
31. Ibid., Paragraph 19.
32. South Korea, which sat on the fence under the previous government of Roh Moo-hyun, formally joined the PSI effort following the second nuclear test.
33. Ibid., Paragraph 11.
An important loophole is that such interdiction must have the consent of the country under which the vessel is flagged; acting under Chapter VII, Article 41 of the U.N. Charter, UNSCR 1874 does not authorize the use of force. If the flag state does not consent, then “the flag state shall direct the vessel to proceed to an appropriate and convenient port for the required inspection.” North Korea probably transports most prohibited materials under its own flag, and this provision could provide additional incentives to do so. Nonetheless, the resolution does impose constraints because the major flags of convenience, such as Panama and Liberia, will come under strong pressure to comply, while failure to cooperate allows states to deny ships bunkering services. In 2009, a shadowed North Korean ship believed to be headed to Myanmar was ultimately forced to return, presumably after North Korean authorities came to believe that the ship would be searched either in Singapore when it stopped for refueling or in Myanmar, its reputed destination. Significant shipments of weapons were also interdicted in 2009 and 2010 in the United Arab Emirates, Thailand, and South Africa.

In addition to interdiction, the UNSC resolution explicitly provides for the use of financial means to stop the flow of WMD-related trade. These measures are potentially more sweeping than those related to trade sanctions per se, since the resolution permits the blocking of transfers and even the freezing of any assets that “could contribute” to North Korea’s weapons programs or activities. Such a provision is open to broader interpretation than trade sanctions because it could in principle affect the finances of any firm involved in both weapons-related and nonweapons-related activities.

Finally, the resolution establishes a new process for overseeing the sanctions effort by creating a panel of experts. The panel will oversee the implementation of both UNSCR 1718 and 1874, monitor efforts on the part of member states, and provide recommendations to the Security Council.

The passage of this new resolution demonstrates growing Chinese disaffection with North Korea’s behavior. The resolution also garnered support from Russia. Nonetheless, the changing political geography of North Korean trade suggests why sanctions may not be effective. Those countries most inclined to sanction North Korea do not trade with or invest in it; they have even seen economic relations decline. Japan, once an important mainstay of the North Korean economy through transfers, has implemented an embargo.

34. Ibid., Paragraph 13.
35. Ibid., Paragraph 18.
(although circumvention through third countries is reputedly easy). The U.S. maintains modest restrictions on trade with North Korea (reconfirmed on June 24, 2009, by President Barack Obama), but trade is so minuscule that Washington has little leverage to gain through additional bilateral trade restrictions. Indeed, the North Koreans even rejected the last important economic link to the U.S. by declining to continue a generous food aid program negotiated in 2008. Aid from South Korea has dropped to a trickle, and as we have seen, commercial relations through the KIC have also been held hostage by new North Korean demands to renegotiate contracts. At the same time, China continues to show reluctance to take more aggressive economic actions; to the contrary, during an important bilateral summit with Chinese Premier Wen Jiabao in October 2009, the Chinese appeared to pledge more economic support to North Korea.

What about financial sanctions? This particular form of sanction does not require multilateral coordination. Foreign banking institutions that conduct significant business in the U.S. have a strong interest in avoiding institutions that the U.S. Treasury has identified as engaged in illicit finance. This was demonstrated clearly in 2005, when the Treasury signaled that a small Macao bank, Banco Delta Asia, was possibly engaged in money laundering activities on North Korea’s behalf. Without any further action, the bank immediately suffered a run on its deposits and was forced into receivership, freezing $25 million of North Korean funds. The issue became a major sticking point in the Six Party Talks but also appeared to motivate the North Koreans to return to the talks, setting the stage for the agreements reached in 2007. Through 2009, the U.S. continued to show a strong interest in the use of this instrument, although its effect may be diminished by North Korean efforts to diversify the country’s financial as well as trade linkages.

CONCLUSION

What implications, if any, do our observations about economic reform and the external sector have for the politics of North Korea’s nuclear program and proliferation activities? The first and most general point goes to the question of the regime’s intentions. It is virtually impossible for outsiders to be confident that they understand the inner workings of North Korean decision-making. But it is important to ask whether North Korea’s military and diplomatic signals are aligned with developments in the North Korean
political economy. Had the leadership been pursuing a reformist path since the onset of the crisis, however gradually, it would have provided a signal that the country was open to economic inducements.

The North Korean economy is indeed becoming more open, but the leadership remains highly ambivalent about this development and about reform more generally. The willingness to terminate the U.S. food aid program, the government’s behavior with respect to the KIC, the ongoing meddling in the border trade, and particularly the currency conversion of 2009 all point to a regime that is indifferent to, if not actively hostile toward, reform and opening. This disposition has obvious implications for any engagement strategy.

A second conclusion has to do with the political geography of North Korea’s external economic relations. An unintended consequence of the crisis has been to push North Korea into a closer economic relationship with China and other trading partners that show even less interest in sanctions or political quid pro quos. Consequently, China has become even more central to any effective sanctions effort. Cutting off critical Chinese oil shipments, much less a complete trade embargo, would lead to a severe disruption of the North Korean economy. But China has ambivalent, conflicting interests with respect to North Korea.\textsuperscript{36} North Korean provocations have adverse strategic consequences for China, for example, by pushing South Korea, Japan, and the U.S. closer together. Security concerns have already triggered greater interest in theater missile defenses and even speculation about whether Japan would “go nuclear.” On the other hand, conservative Chinese analysts believe that China benefits from having an allied buffer state on its border. China also has concerns that excessive pressure on the regime could provoke its collapse, in the worst case sending millions of North Korean refugees into China. A stable, nuclear-armed North Korea may be preferable to an unstable one, nuclear or not. These considerations serve to limit the degree of pressure that Beijing is willing to bring to bear.

Yet, even if China shows increased willingness to impose limited sanctions, a number of findings from the literature on sanctions suggest there are limits on what Chinese influence might yield. First, the literature suggests that sanctions are unlikely to induce countries to abandon core political goals.\textsuperscript{37} As a

\textsuperscript{36} Scott Snyder, \textit{China’s Rise and the Two Koreas: Politics, Economics, Security} (Boulder, Colo.: Lynne Rienner, 2009).

small country increasingly dependent on foreign trade and investment, North Korea would appear highly vulnerable to external economic pressure. But given the extreme priority that the regime places on its military capacity, it is unlikely that the pain the world can bring to bear will induce North Korea to surrender its nuclear weapons. Moreover, the change in its trading partners has increased the difficulty in coordinating sanctions, and thus mitigated their potential effectiveness.

A third conclusion has to do with the incentives to proliferate. There is some evidence that North Korea moderated its missile proliferation activities during periods when rapprochement with the U.S. was a priority; the late Clinton period provides an example. However, in the absence of such an interest, the incentives to engage in arms transfers increase. Indeed, they arguably become greater because of the declining prospects for trade, investment, and assistance from the U.S., Japan, South Korea, and Western Europe. Given that the U.S. has even less leverage over customers such as Iran and Syria than it does over China, the only policy options for dealing with this particular form of trade expansion are much more direct, including continued multilateral cooperation to interdict weapons shipments or even sanctions on North Korea’s Middle Eastern trading partners.

A fourth conclusion concerns the more transformative conception of engagement that undergirded the Kim Dae-jung and Roh Moo-hyun administrations’ approaches to North Korea. The engagement bet was not an irrational one. If North Korea had embarked on a more robust reformist path, the postulated mechanisms of long-run transformation through engagement might well have taken place. Increased trade, investment, and aid would have contributed not only to a deeper engagement in the world economy but been part and parcel of an internal transformation as well.

Yet, as we have seen, the North Korean economy is structured in such a way that outside economic ties are still largely monopolized by SOEs and other gatekeepers, such as the military in the case of the KIC. Under such circumstances, the precise design of engagement policies requires very close scrutiny. Direct transfers to the regime obviously will not have the same transformative effects as private investment and trade. Even nominally commercial relations can be exploited if the North Korean counterparts believe that these relations are ultimately political in nature, subsidized, and thus vulnerable to blackmail; again, the KIC is an important example.
Finally, we conclude by underlining that the international community faces what might be called a “latent” humanitarian problem with respect to North Korea. These concerns were muted by a somewhat better-than-expected harvest in 2008, and probably also by commercial purchases of food in the winter and early spring of 2008–09. But the currency conversion quickly reversed these limited gains, producing spiraling food prices in early 2010. Even if North Korea does muddle through the aftermath of this disastrous economic experiment, there is little indication that the country is capable of feeding itself. As a result, the prospect of a recurrence of food shortages is a near certainty in the absence of reforms. As in the past, the peculiar difficulty of dealing with North Korea stems in part from the humanitarian dilemma the country poses to the international community: it is difficult to turn away from the substantial suffering that the regime imposes on its own population but at the same time unproductive to extend significant economic assistance in the absence of reform.