

# A NEW INTERNATIONAL ENGAGEMENT FRAMEWORK FOR NORTH KOREA?

Contending Perspectives

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# Political Economy of North Korea: Historical Background and Present Situation

Marcus Noland

By standard statistical measures, North Korea (Democratic People's Republic of Korea [DPRK]) is the world's most militarized society,<sup>1</sup> and domestic propaganda incessantly proclaims the virtues of "military-first" politics.<sup>2</sup> If comparable statistical measures were available for politicization, North Korea might rank first on this criterion, too. Internally, all aspects of society are suffused with politics, and externally, politics thoroughly permeates not only the country's diplomatic relationships but also its economic relations.

A famine in the late 1990s resulted in the deaths of perhaps 600,000 to 1 million people out of a pre-famine population of roughly 22 million. Given the regime's extreme preference for guns over butter, the North Korean economy does not produce enough output to sustain the population biologically, and population maintenance is aid dependent. Yet the October 2002 revelation of a nuclear weapons program based on highly enriched uranium (in addition to a plutonium-based program acknowledged a decade earlier), undertaken in contravention of several international agreements, and North Korea's subsequent withdrawal from the Nuclear Non-Proliferation Treaty have put continued international assistance in doubt.

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1 According to U.S. Department of State figures (DOS 2003), North Korea has traditionally led the world in measures such as military expenditure as a share of national income, or share of the population under arms. During its war with Ethiopia, the percentage of Eritrea's population under arms and military expenditures as a share of gross domestic product (GDP) actually exceeded the comparable figures for North Korea, as did Angola in the midst of its civil war, but, with the cessation of hostilities in the Horn of Africa and the end of the Angolan civil war, in all likelihood North Korea has reasserted its historic primacy on these measures. It is assuredly the case that no other country during peacetime is militarized to the degree North Korea is.

2 According to Koh (2004) the modifier *songun* (military-first) was used 40 times in the 2004 New Year's Day joint editorial of *Rodong Sinmun* (Labor News), *Choson Immigun* (The Korea People's Army), and *Ch'ongryon Chonwi* (Youth Vanguard).

The situation is further complicated by internal economic policy changes initiated in July 2002. These reforms included marketization of the economy, a large increase in the overall price level, the promotion of special economic zones, and a diplomatic opening to Japan intended to secure the provision of billions of dollars in post-colonial claims.

Unlike the diplomatic maneuvering of the past few years, which has had little immediate impact on most North Koreans, the economic reforms have directly affected the masses, altering economic, political, and social relations at the grassroots level. The reforms are contributing to growing social differentiation and inequality, creating what both United Nations (UN) officials and nongovernmental organization (NGO) representatives have described as a new class of urban poor. Those such as senior party officials with access to foreign exchange will be relatively insulated from the effects of inflation. Agricultural workers may benefit from “automatic” pay increases as the price of grain rises, but salaried workers without access to foreign exchange will fall behind. In other words, the process of marketization and inflation will contribute to the exacerbation of existing social differences in North Korea.

The implications for “losers” could be quite severe. According to a World Food Programme (WFP 2003b) survey, most urban households are food insecure, spending 75–85 percent of their incomes on food. In December 2003 Masood Hyder, the UN’s humanitarian relief coordinator in North Korea, told the world press that the food problem was concentrated among up to 1 million urban workers, a view echoed by Rick Corsino, head of the WFP’s local operation, who claimed that “some people are having to spend all their income on food.”<sup>3</sup> According to the UN Food and Agricultural Organization (UNFAO 2003), for the period 1999–2001, 34 percent of North Korea’s population was malnourished, though it is unclear on what basis the organization reached such a precise figure, especially in light of the problematic nature of the survey evidence as outlined in Noland (2003). Similarly, in December 2003 the UN’s Office for the Coordination of Humanitarian Affairs claimed that the rate of “severe malnourishment” among children was 42 percent, apparently on the basis of the questionable 2002 stunting estimate.

Even if one is skeptical as to the precise figures, there is less room to doubt the rupture of the traditional social compact, necessitating a reinterpretation of the North Korean doctrine of *juche*, or self-reliance, to legitimate the reforms and justify the departure from the country’s socialist tradition. The response has been to intensify the military-first campaign, elevating the military above the proletariat in the North Korean political pantheon (Frank 2003a, Noland 2004). The effect has been to overturn the traditional paths to power and status: captains and entrepreneurs have now replaced party

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3 See Watts (2003) and Cho (2003). Kim (2003, 147–64) and Amnesty International (2004) contain a more general analysis of food insecurity issues.

cadres and bureaucrats as preferred sons-in-law. As the military waxes while the commitment to socialism wanes, North Korea increasingly resembles the totalitarian fascist regimes its propaganda excoriates, albeit a dynastic one. The central issue is whether the current regime can manage this internal change while it confronts the implicit legitimization challenge posed by prosperous, democratic South Korea and diplomatic tensions emanating from its nuclear weapons program.

## Background on North Korea

Before the partition of the Korean peninsula at the end of the Second World War, most Korean industries were located in the North; the South was the breadbasket. In 1950, North Korea invaded South Korea. The see-saw character of the war, which saw armies of both sides twice traversing nearly the entire length of the peninsula, destroyed most of the physical capital stock. There was considerable population movement as well, mostly from the North to the South. It is impossible to ascertain with any degree of certainty the capacities of the two countries at the end of the hostilities in 1952.<sup>4</sup>

Under Soviet tutelage, the North set about establishing a thoroughly orthodox centrally planned economy, remarkable only in the degree to which markets were suppressed. In 1955, founding leader Kim Il-sung proclaimed *juche* the national ideology, and under his leadership North Korea developed as the world's most autarkic economy, never joining the Council of Mutual Economic Assistance and going so far as to time its central plans to frustrate linkage with those of fraternally allied socialist states.

Under such relatively autarkic conditions, North Korean industrial development was characterized by excessively diverse, subscale, high-cost production. These inefficiencies were compounded by national security considerations that contributed by a lack of agglomeration in the spatial location of industrial activities and the placement underground of industrial assets and facilities such as the electrical grid.

Following the Korean War, agriculture was collectivized, quantitative planning in production was introduced, state marketing and distribution of grain were established, and private production and trade were prohibited. Collectivization was accompanied by an increase in electrically powered irrigation and the use of industrial inputs such as tractors, chemical fertilizers, and pesticides.

In response to food shortages in 1970–73, the degree of centralization of agricultural planning was intensified. The authorities altered planting patterns, specifically replacing traditional food crops such as tubers, millet, and potatoes with maize. Yields were increased, but they were susceptible to a fall in inputs. A Cultural Revolution–type movement was created, and young

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4 For general background on the North Korean economy, see Hwang (1993) and Noland (2000).

Communists were dispatched to initiate ideological, cultural, and technical education of farm households. New rural educational institutions were established, and existing rural officials and staff were reassigned and required to enroll in these *juche* curriculum programs. This social engineering eroded knowledge of, respect for, and influence of traditional farming techniques; rural life was thoroughly regimented by the state, and any sort of individual initiative stifled (Lee 2003; Gey 2004, 115–33).

The present crisis has its origins in a multifaceted set of developments in the late 1980s, although the precise causal relationships are unclear. Throughout its history, the country has run recurring balance-of-payments deficits, posing a chronic financing issue. After defaulting on international creditors in the 1970s, North Korea was frozen out of international capital markets and came to rely increasingly on aid from fraternally allied socialist states, remittances from ethnic Koreans in Japan, and illicit activities such as drug trafficking and counterfeiting to generate foreign exchange.

Despite its *juche*-inspired declarations of self-reliance, North Korea has been dependent on outside assistance throughout its entire history, with first the Soviet Union and later China playing the role of chief benefactor or patron. The North Koreans have compensated for this dependence by ferociously denouncing it,<sup>5</sup> portraying aid as tribute paid to the ideologically pure North Korean state (Eberstadt 1999) and trying to play patrons off against each other.<sup>6</sup> Eventually, frustrated by North Korean unwillingness to repay accumulated debts, the Soviets withdrew support and, according to U.S. Central Intelligence Agency (CIA) figures, the net flow of resources turned negative in 1987.<sup>7</sup>

That same year the North Koreans initiated a number of at times conflicting policies in the agricultural sector, including the expansion of state farms, tolerance of private garden plots, expansion of grain-sown areas, transformation of crop composition in favor of high-yield items, maximization of industrial inputs subject to availability, and the intensification of double-cropping and dense planting. Continuous cropping led to soil depletion, and the overuse of chemical fertilizers contributed to acidification of the soil

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5 For example, in 2000, the day after South Korea began shipping \$100 million of assistance to the DPRK and while the UN agencies were urging international donors to commit to new aid to avert catastrophe, *Rodong Sinmun*, the official newspaper of the North Korean government, ran a commentary that read in part, “The imperialists’ aid is a tool of aggression . . . a dangerous toxin which brings about poverty, famine, and death, not prosperity.”

6 In a somewhat different context, Flake (2003, 39) describes a similar set of attitudes toward a different set of patrons: “DPRK officials were successfully able to come across not as the beggar, but instead as the recipient of entreaties from the outside world. In contrast, the would-be donors, the NGOs, became the supplicants, asking the DPRK for the ‘privilege’ of helping the North Korean people.”

7 There is some controversy as to how seriously to take the CIA’s numbers. It is unclear, for example, to what extent the figure takes into consideration the implicit subsidy of the USSR’s oil exports to North Korea. The figures developed by Eberstadt et al. (1995, 87–104) show the USSR (Russia) continuing to run a significant trade surplus with North Korea until 1991.

and eventually a reduction in yields. As yields declined, hillsides were denuded to bring more and more marginal land into production. This contributed to soil erosion, river silting, and, ultimately, catastrophic flooding. Isolation from the outside world reduced genetic diversity of the North Korean seed stock, making plants more vulnerable to disease.

These effects were compounded by the tremendous trade shocks that hit the economy starting in 1990 as the Soviet Union disintegrated and the Eastern bloc collapsed. The Soviets had supplied North Korea with most of its coal and refined oil and one-third of its steel. Trade with the Soviet Union accounted for more than half of North Korea's two-way trade. The fall in imports from Russia in 1991 was equivalent to 40 percent of all imports, and by 1993 imports from Russia were only 10 percent of their 1987–90 average (Eberstadt et al. 1995, 87–104). North Korea proved incapable of reorienting its commercial relations in the face of this massive trade shock. The North Korean industrial economy imploded and, deprived of industrial inputs, agricultural output plummeted.

In response, the government initiated a number of retrenchment campaigns, but by the spring of 1995 the situation had become so dire that the North Korean government approached first the Japanese government and then the South Korean government for food assistance, reaching agreements in June. In July it announced to the public that it was receiving external assistance, although it failed to mention the South Korean role. In August 1995, North Korea made a formal request for emergency assistance to the United Nations and immediately began receiving aid from the UN. According to Moody's (2003), food assistance has been running at approximately \$500 million annually since 1998.

The provision of this aid has posed a variety of challenges and ethical dilemmas for private and official providers of humanitarian assistance. While it is fair to say that cooperation has improved since assistance was initiated in the mid-1990s, the situation in North Korea remains highly nontransparent. Almost nine years after its arrival, the WFP is still barred from areas accounting for approximately 15 percent of the population, is unable to employ Korean speakers, and is forced to submit to prenotification for site visits. There can be little doubt that North Korea violates minimum standards of nondiscrimination with respect to the distribution of aid. Confronted with this situation, a number of private NGOs have withdrawn from the country.<sup>8</sup>

Catastrophic floods in July and August 1995 added to North Korea's suffering.<sup>9</sup> Although flooding contributed to the food crisis in North Korea, agriculture, like the rest of the economy, has been in secular decline since the

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8 See Hawk (2003), Noland (2003), and Amnesty International (2004) for discussion.

9 The government announced that 5.4 million people had been displaced, 330,000 hectares of agricultural land had been destroyed, and 1.9 million tons of grain had been lost. The government put the total cost of the flood damage at \$15 billion. While the flooding was considerable, the consensus of outside observers was that the government's claims were exaggerated. For example, a UN

beginning of the decade. On the basis of their econometric analysis of North Korean agricultural production, Smith and Huang (forthcoming) conclude that “the dominant triggering factor in the crisis was the sharp loss of supplies of agricultural inputs following the disruption of the trade with the socialist bloc from the late 1980s. . . . The contribution of climatic factors to the agricultural crisis, as stressed by North Korea’s policy-makers was at most a secondary cause.” This conclusion is reinforced by the computable general equilibrium model-based simulation of Noland et al. (2001), who found that restoration of flood-affected land and capital would have but a minor impact on the availability of food. Taking at face value the WFP’s estimates of human needs, even without flooding, North Korea would have entered the mid-1990s with a substantial, apparent food deficit.

Given the secrecy of the North Korean regime, it is unsurprising that the timing and impact of the resulting famine are still not well understood. Contemporaneous estimates of the excess death toll vary enormously, ranging from 220,000 to 3.5 million, but the most recent and sophisticated attempts to measure excess deaths put them in a range of roughly 600,000 to 1 million, or approximately 3 to 5 percent of the pre-crisis population (Goodkind and West 2001, 219–38; Lee 2003).<sup>10</sup> It did not have to be this way. Morocco, a country of similar size and in certain respects with economic characteristics similar to the DPRK’s, suffered a similar fall in domestic output in the late 1990s, but a combination of increased exports and increased foreign borrowing allowed it to cover its food deficit through imports. Times were hard, but Morocco did not experience famine—and it recovered.

In parallel with the famine, North Korea became embroiled in a diplomatic confrontation with the United States over its nuclear weapons program. North Korea adroitly used the concerns of the world community to extract resources from the outside world in return for the North’s supposed adherence to international norms. Aid was repeatedly provided to North Korea as a quid pro quo for North Korean participation in diplomatic meetings. Between 1995 and 2002 North Korea received more than \$1 billion in

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survey concluded that the flooding displaced 500,000 people, not the 5.4 million the government initially claimed. Nevertheless, the floods played an important public relations role inasmuch as they facilitated the North Korean government’s portrayal of the famine as a product of natural disaster (the government unit charged with obtaining international assistance was renamed the Flood Damage Rehabilitation Committee), a guise that a number of foreign relief agencies found advantageous. The floods of 1995 were followed by more, though less severe, floods in July 1996, and renewed appeals for help.

10 North Korean officials have provided a low-end estimate of famine-related deaths of 220,000 people, or roughly 1 percent of the pre-crisis population. Robinson et al. (1999, 291–5) reconstructed mortality rates for a single heavily affected province and concluded that between 1995 and 1997 nearly 12 percent of that province’s population had died. The Buddhist Sharing Movement, an NGO, extrapolating to the entire country from an analysis of refugee interviews and observations on the ground, produced estimates of famine-related deaths on the order of 2.8 to 3.5 million. In 2003, the USAID administrator, Andrew S. Natsios, testified that “2.5 million people, or 10 percent of the population” had died in the famine (Natsios 2003). This is almost surely an exaggeration. See Noland (2003) for a further discussion of these and other estimates.

food and energy assistance from the United States, making it in the late 1990s Washington's largest bilateral aid recipient in East Asia.

These trends were reinforced by the election of Kim Dae-jung as president of South Korea and the initiation of his Sunshine Policy. The level of South Korean financial support to the North Korean government is uncertain because, as documented in the 2003 corruption trials, some of the assistance has been made illegally, under the table. However, the ratings agency Moody's puts the budgetary costs to South Korea at \$1.7 billion during Kim Dae-jung's presidency. Official aid has continued under the administration of Roh Moo-hyun, reaching \$315 million in 2003.

Aid is a pure rent to the incumbent who can dole it out with the sole object of maintaining his incumbency. It acts as regime-sustaining walking-around money, facilitating poor governance while supporting patronage. Anecdotal evidence of growing social differentiation in the DPRK, in part caused by the misappropriation of aid for private purposes, is consistent with this view. As the public distribution system (PDS), the traditional mechanism through which roughly two-thirds of the population obtained food, failed and the famine intensified, food was increasingly allocated through informal markets. In these circumstances control of aid potentially conveys astronomical rents, a situation abetted by the inability of the WFP to monitor continuously the distribution of supplies from port of entry to final recipient.<sup>11</sup>

Beyond the issue of diversion, even in the case of in-kind humanitarian assistance, food obtained on concessional terms has largely crowded out commercial imports, acting as implicit balance of payments support (Noland 2003). There is a large economics literature demonstrating that aid tends to be fungible, simply supporting government consumption according to the preexisting preferences of the recipient governments (Pack and Pack 1990, 188–94; 1993, 258–65). Given the strong propensity of the North Korean government to spend on its military, the implications are obvious.<sup>12</sup>

## July 2002 Reforms

In July 2002, the government of North Korea announced changes in economic policy that could be regarded as having four components: micro-economic policy changes, macroeconomic policy changes, special economic

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11 Snyder (2003, 119) observes: "[T]he amount of food distributed through the PDS is no longer an accurate indicator of imminent distress within the North Korean system, yet it has remained the WFP's primary indicator of distress and the primary vehicle through which the WFP distributes food inside the country. In this respect, the WFP is an ally of the government in its efforts to reestablish control over the means of production." An MSF researcher (Terry 2001) explains: "[B]y channeling [aid] through the regime responsible for the suffering, it has become part of the system of oppression." See Manyin and Jun (2003) for a more extensive discussion of aid diversion issues.

12 Simulations reported in Noland et al. (2001) illustrate how military spending, for example, could be expected to increase with the provision of humanitarian aid. Noland (2004) contains a more general discussion of the political preconditions for effective use of aid.

zones, and aid seeking.<sup>13</sup> These initiatives followed moves begun in 1998 to encourage administrative decentralization (Oh 2003). A September 2003 cabinet reshuffle holds forth the promise of younger, and perhaps more technocratic, leadership. Amid these changes, there has been no mention of the military's privileged position within the economy; indeed, the military-first campaign has intensified.

Microeconomic reforms involve, among other things, an attempt to increase the importance of material incentives. Opinions range widely about what the North Koreans are trying to accomplish.<sup>14</sup> In the industrial sector there is some thought that the government was attempting to adopt a dual-price strategy similar to what the Chinese have implemented in the industrial sphere.<sup>15</sup> In essence, the Chinese instructed their state-owned enterprises to continue to fulfill the plan, but when planned production obligations were fulfilled, the enterprises were free to hire factors and produce products for sale on the open market (Lau et al. 2000, 120–43). In other words, the plan was essentially frozen in time, and marginal growth occurred according to market dictates. Yet the North Korean planning apparatus may have reached such an advanced stage of decline that the conditions under which such an approach might have been viable have passed (Babson and Newcomb 2004).

North Korean enterprises have been instructed that they are responsible for covering their own costs—that is, no more state subsidies. But, at the same time, the state has administratively raised wage levels, and certain favored groups such as military personnel, party officials, scientists, and coal miners receive supernormal increases (Gey 2004, table 2). This alteration of real wages across occupational groups could be interpreted as an attempt to enhance the role of material incentives in labor allocation or, alternatively, as a simple attempt to reward favored constituencies. Likewise, the state continues to maintain an administered price structure, although by fiat the state

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13 Assessments of both the impact of the policy changes and the political motivations behind their introduction vary. See Lee (2002, 357–64), Chung (2003, 43–53), Frank (2003b), Nam (2003, 18–22), Newcomb (2003, 57–60), Oh (2003, 72–8), and Gey (2004).

14 Oh (2003, 72) disputes this notion, arguing that the aim of the policy changes was “to shift the country’s economic control mechanism from one based on material balances in a traditional socialist mandatory planning system to one managed through a monetary mechanism. . . . The situation is quite different from that in China at the beginning of its reform process, where reform-minded leaders boldly argued that economic reform measures were imperatives, not policy options.” Newcomb (2003, 59 [emphasis added by Newcomb]) also emphasizes the shift from quantitative planning to a monetized economy and reports a statement by one official that could also be interpreted as suggesting a more limited aim of the policy changes: “this objective (or reform) will only be achieved by removing the last ‘vestiges’ of the *Soviet system* from the DPRK economy.” Frank (2003b) also quotes a similar denunciation of “Soviet-type” practices. These statements could be interpreted as manifestations of a North Korean attempt to justify ideologically a uniquely North Korean “third way” policy package.

15 Gey (2004, 2) strongly disputes this view, at least in regard to the agricultural sector: “[T]he measures taken so far suggest that the North Korean leadership has decided against Chinese-style reform and for the sort of reform deployed repeatedly from the 1960s by the state and party leaders of the formerly socialist countries of central and eastern Europe as they attempted to improve the performance of their planned economies. . . . [T]his will fail in North Korea as well.”

prices are being brought in line with prices observed in the markets. The North Koreans have not announced any mechanism for periodically adjusting prices, however; over time, disequilibria—possibly severe—will develop.

In essence, enterprise managers are being told to meet hard budget constraints, but they are being given little scope to manage. Managers have been authorized to make limited purchases of intermediate inputs and to make autonomous investments out of retained earnings. They are also permitted to engage in international trade. Yet it is unclear to what extent managers have been sanctioned to hire, fire, and promote workers, or to what extent remuneration will be determined by the market.

This is problematic (as it has proved to be in other transitional economies): the state has told the enterprises that they must cover costs, yet it continues to administer prices; and, in the absence of formal bankruptcy or any other exit mechanism, there is no prescribed method for enterprises that cannot cover costs to cease operations nor, in the absence of a social safety net, any indication of how workers from closed enterprises would survive.

Anecdotal evidence suggests that North Korean enterprises are exhibiting a variety of responses: some have set up side businesses, either as a legitimate coping mechanism or as a dodge to shed unwanted labor; some have cut wages (despite the official wage increase); and some have closed. It is likely that some enterprises will be kept in operation, supported by implicit subsidies, either through national or local government budgets or through recourse to a reconstituted banking system, which is being restructured. Indeed, the North Koreans have sent officials to China to study the Chinese banking system, which, although it may well have virtues, is also the primary mechanism through which money-losing state-owned firms are kept alive. Officials have also traveled to Vietnam to study the Vietnamese reform experience.

In the agricultural sector, the government has implemented a policy of increasing the procurement prices of grains to increase the volume of food entering the PDS, along with a dramatic increase in PDS prices to consumers, with the retail prices of grains rising 40,000–60,000 percent in the space of six months (Noland 2003, table 4). The increase in the procurement price for grain was in part motivated to counter the supply response of the farmers who, in the face of derisory procurement prices, were diverting acreage from grain to tobacco and using grain to produce liquor for sale.

The maintenance of the PDS as a mechanism for distributing food is presumably an attempt to maintain the social contract that everyone will be guaranteed a minimum survival ration while narrowing the disequilibrium between the market and plan prices. Residents are still issued monthly ration cards; if they do not have sufficient funds to purchase the monthly allotment, it is automatically carried over to the next month. Wealthy households are not allowed to purchase through the PDS quantities in excess of

the monthly allotment. The system is organized to prevent arbitrage in ration coupons between rich and poor households.<sup>16</sup>

Some have questioned the extent to which this is a real policy change and how much this is simply a ratification of system-fraying that had already occurred—there is considerable evidence that most food, for example, was already being distributed through markets, not the PDS. But this may indeed be precisely the motivation behind the increases in producer prices—with little supply entering the PDS, people increasingly obtained their food from nonstate sources; and, by bringing more supply into state-controlled channels, the government can try to reduce the extent to which food is allocated purely on the basis of purchasing power. Yet another motivation may be to reduce the fiscal strain imposed by the implicit subsidy provided to urban consumers.

The WFP (2003a) reports that, since the July 2002 price changes, prices for grain in the farmers' markets have risen "significantly" while the PDS prices have remained largely unchanged. Anecdotal accounts suggest that, as a consequence, despite the increase in procurement prices, the policy has not been successful in coaxing back into the PDS domestic supply (as distinct from international aid). Indeed, some anecdotal reports indicate that the PDS is not operating in all areas of the country.

When China began its reforms in 1979, more than 70 percent of the population was in the agricultural sector. (The same held true for Vietnam when it began reforming the following decade.) De-bureaucratization of agriculture under these conditions permits rapid increases in productivity and the release of labor into the nascent non-state-owned manufacturing sector. The key in this situation is that change is likely to produce few losers: farmers' incomes go up as marginal and average value product in the agricultural sector increase; incomes of those leaving the farms rise as they receive higher-wage jobs in the manufacturing sector; and urban workers in the state-owned heavy-industry sector benefit as their real wages rise as a result of lower food prices associated with expanded supply. The efficiency gains in agriculture essentially finance an economy-wide Pareto improvement (that is, no one is made worse off). This dynamic was understood by Chinese policymakers, who used a combination of the dual-price system (allowing the market to surround the plan, to use a Maoist metaphor) and side payments to state-owned enterprises, their associated government ministries, and allied local politicians to suppress political opposition to the reforms. The existence of a large, labor-intensive agricultural sector is one of the few robust explanators of relative success in the transition from central planning to the market (Åslund et al. 1996, 217–313).

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<sup>16</sup> Oh (2003) claims that the rationing coupons have been abolished and that, in theory, wealthy households can buy unlimited supplies through the PDS.

In contrast, North Korea has perhaps half that share employed in agriculture. As a consequence, the absolute magnitude of the supply response is likely to be smaller and the population share directly benefiting from the increase in producer prices for agricultural goods roughly half as big as in China and Vietnam. This means that reform in North Korea is less likely to be Pareto-improving than the cases of China or Vietnam. Instead, reform in North Korea is more likely to create losers and, with them, the possibility of unrest, as discussed in the next section.

One result of these changes has been a noticeable upsurge in small-scale retail activity, with Gey (2004) estimating that 6–8 percent of the workforce is engaged in informal trading activities. Yet there is little if any evidence of a resurgence in industrial activity, and consensus among most outside observers is that, at this writing, marketization has not delivered as hoped. The fall 2003 harvests were fairly large, but it is unclear how much of this is due to favorable weather, provision of fertilizer aid by South Korea, and incentive changes.

At the same time the government announced the marketization initiatives, it also announced tremendous administered increases in wages and prices. To get a grasp on the magnitude of these price changes, consider this: when China raised the price of grains at the start of its reforms in November 1979, the increase was on the order of 25 percent. In comparison, North Korea has raised the prices of corn and rice by more than 40,000 percent. In the absence of huge supply responses, the result will be an enormous jump in the price level and possibly even hyperinflation.<sup>17</sup> Unfortunately, macroeconomic stability at the time that reforms are initiated is the second robust predictor of relative success in transition from the plan to the market (Åslund et al. 1996).<sup>18</sup> High rates of inflation do not portend well for North Korea.

Under these conditions, access to foreign currency may act as insurance against inflation, and, in fact, the black-market value of the North Korean *won* has dropped steadily since the reforms were announced, with one recent report putting it at approximately 1,200 *won* to the dollar in April 2003. In this respect, the authorities' treatment of the external sector has been confused. After announcing the dramatic price increases, the government initially maintained that it would not devalue the currency (though this would have caused a massive real appreciation that would have destroyed whatever

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17 See Frank (2003b), Noland (2003), and Oh (2003) for recitations of other, non-agricultural, price increases.

18 North Korea looks better on another explainer of success in the transition—the viability of a pre-socialist commercial code. The commercial code of South Korea has its origins in the colonial era Japanese commercial code that in turn was transplanted from Prussia. North Korean scholars and officials at legal workshops have exhibited some familiarity with the concepts of the contemporary South Korean commercial code on the basis of their understanding of their common pre-socialist legal system. Presumably this has helped the two countries over the past several years to conclude the handful of agreements that provide a conventional legal framework for inter-Korean economic relations.

international price competitiveness the North Korean economy has); then it periodically began devaluing the currency as its value in the black market fell.<sup>19</sup> Tariffs on consumer products such as textiles, soap, and shoes have doubled, from 20 percent to 40 percent (Oh 2003), possibly as an attempt to deal with the overvaluation of the real exchange rate and the surge of imports into the country but more likely as an attempt to simply generate revenue in the absence of a functioning tax system.

The government apparently continues to insist that foreign-invested enterprises pay wages in hard currencies (at wage rates that exceed those in China and Vietnam). For a labor-abundant economy this curious policy would seem to be the very definition of a contractionary devaluation, blunting the competitiveness-boosting impact of the devaluation by aborting the adjustment of relative labor costs while raising the domestic resource costs of imported intermediate inputs.

In yet another wheeze to extract resources from the population, in March 2003 the government announced the issuance of “people’s life bonds” that, despite their name, seem to more closely resemble lottery tickets than bonds as conventionally understood. These instruments have a 10-year maturity, with principal repaid in annual installments beginning in year five (there does not appear to be any provision for interest payments and no money for such payments has been budgeted). For the first two years of the program, there would be semi-annual drawings (annually thereafter), with winners to receive their principal plus prizes. No information has been provided on the expected odds or prize values other than that the drawings are to be based on an “open and objective” principle. The government’s announcement states, without irony, that “the bonds are backed by the full faith and credit of the DPRK government.” Committees have been established in every province, city, county, institute, factory, village, and town to promote the scheme—citizens purchasing these “bonds” will be performing a “patriotic deed.”<sup>20</sup> Both the characteristics of the instrument and the mass campaign to sell it suggest that politics, not personal finance, will be its main selling point.<sup>21</sup> According to Kim (1998), when the government has resorted to lottery-like

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19 After about two weeks, in August 2002, the government announced a devaluation of the currency from 2.1 *won* to 150 *won* to the dollar, which approached the contemporaneous black-market rate of around 200 *won* to the dollar. A second devaluation, this time to 900 *won* to the dollar (again approaching the black-market rate) was announced in October 2003.

20 The discussion in Chung (2003) suggests that purchases of the bonds may be compulsory. According to a Korea Trade-Investment Promotion Agency (KOTRA) translation of a 23 May 2003 Itar-Tass account, although purchases are not mandatory, the authorities use purchases as “a barometer of the buyers’ loyalty and support for the party and the state.”

21 Frank (2003b) argues that the issuance of these instruments is a response to the large expansion in expenditures associated with the increased procurement price for grains, and, indeed, North Korean government expenditures appeared to increase by double digits in 2003. However, the rise in outlays associated with the increase in the procurement price for grain ought to be offset by a similar increase in revenues from the expanded PDS sales. Some have claimed that these instruments could ultimately serve as a basis for privatizing state-owned enterprises.

instruments in the past to deal with monetary overhang problems, they have been unpopular.

The third component of the North Korean economic policy change is the formation of various sorts of special economic zones (SEZs).<sup>22</sup> In September 2002 the North Korean government announced the establishment of a special administrative region (SAR) at Sinuiju. In certain respects the location of the new zone was not surprising; the North Koreans had been talking about doing something in the Sinuiju area since 1998. Yet in other respects the announcement was extraordinary. The North Koreans announced that the zone would exist completely outside North Korea's usual legal structures, that it would have its own flag and issue its own passports, and that land could be leased for 50 years. To top it off, the SAR would be run not by a North Korean but by a Chinese-born entrepreneur with Dutch citizenship named Yang Bin. Yang Bin was promptly arrested by the Chinese authorities.<sup>23</sup>

Ultimately, the planned industrial park at Kaesong, oriented toward South Korea, may have a bigger impact on the economy than either the Rajin-Sonbong or Sinuiju zones. In the long run, South Korean small- and medium-size enterprises (SMEs) will be a natural source of investment and transfer of appropriate technology to the North. However, in the absence of physical or legal infrastructure, they are unlikely to invest. The eventual signing of four economic cooperation agreements between the North and the South on issues such as taxation and foreign exchange transactions could be regarded as providing a legal infrastructure for economic activity by SMEs of negligible political influence.

The industrial park at Kaesong has not yet fulfilled its promise, however. The park has its origins in Hyundai's 1998 deal that set up the Mt. Kumgang tourism venture, and the conglomerate's subsequent dissolution forced the South Korean parastatal KOLAND to take over the project. The North Koreans have inexplicably failed to open the necessary transportation links to South Korea on their side of the demilitarized zone although negotiations with the South on this issue continue.

The fourth component of the economic plan consisted of passing the hat. In September 2002, during the first-ever meeting between the heads of gov-

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22 The first such zone was established in the Rajin-Sonbong region in the extreme northeast of the country in 1991. It has proved to be a failure for a variety of reasons, including its geographic isolation, poor infrastructure, onerous rules, and interference in enterprise management by party officials. The one major investment has been the establishment of a hotel-casino-bank combination. Given the obvious scope for illicit activity associated with such a horizontally integrated endeavor, the result has been less Hong Kong and more Macau North. See Jung et al. (2003) for an appraisal of the North Korean SEZ policy.

23 Press reports subsequently touted first Park Tae-joon, former South Korean general, head of POSCO, and prime minister, and later Eric Hotung, a Hong Kong philanthropist, as Yang's successor. Now it is reported that Jang Song-thaek, brother-in-law of Kim Jong-il, is running the project. One possible ray of hope in these events was the removal of the ceiling of less than 50 percent foreign ownership in joint ventures.

ernment of Japan and North Korea, Chairman Kim managed to extract from Prime Minister Koizumi a commitment to provide a large financial transfer to North Korea as part of the diplomatic normalization process to settle post-colonial claims, despite the shaky state of Japanese public finances.<sup>24</sup> Each of the leaders then expressed regrets for their countries' respective transgressions and agreed to pursue diplomatic normalization. However, Kim's bald admission that North Korean agents had indeed kidnapped 12 Japanese citizens and that most of the abductees were dead set off a political firestorm in Japan. This revelation, together with the April 2003 admission that North Korea possesses nuclear weapons in contravention of multiple international agreements, has effectively killed the diplomatic rapprochement and with it the prospects of a large capital infusion from Japan, as well as already dim prospects of admission to international financial institutions such as the World Bank and Asian Development Bank.

### **Implications for Political Stability**

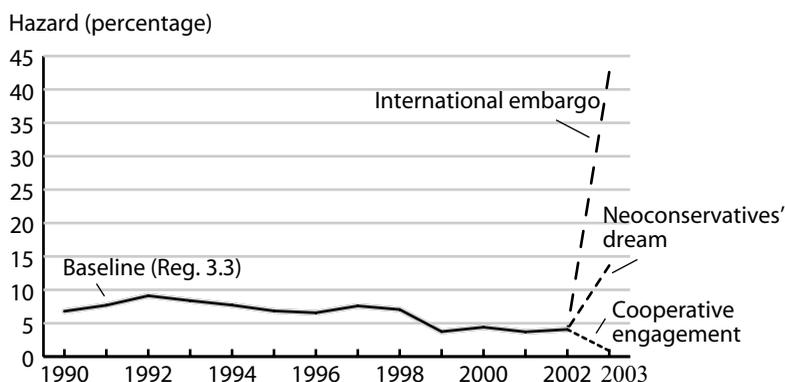
Noland (2004) contains an examination of the likelihood of political instability or, more precisely, regime change, based on formal statistical analysis. The models are estimated from three separate cross-national data sets on political developments worldwide since 1960.<sup>25</sup> Several dozen explanatory variables, generally falling into three categories, were considered. The first category consists of political, legal, and cultural variables that tend to change slowly if at all. These would include such things as the origin of the country's legal system; whether it originated that system, adopted it, or had it imposed by a colonial power; and proxies relating to the quality of domestic political institutions. A second group of variables involves demographic and social indicators that tend to change slowly. These include things like the level of urbanization and the degree of ethnic or religious heterogeneity within a country. Economic policy and performance indicators make up the final category. These measures tend to exhibit the greatest temporal variability. As a consequence, the more slowly changing political and social variables tend to determine whether a particular country is generally prone to instability, while the more rapidly changing economic variables tend to impact whether the likelihood of regime change is rising or falling.

These models were estimated and then used to generate the probability of regime change in North Korea. The data for North Korea come primarily

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24 Japanese officials did not deny formulas reported in the press that would put the total value of a multiyear package in the form of grants, subsidized loans, and trade credits at approximately \$10 billion. This magnitude—adjusted for population, inflation, exchange rate changes, and interest forgone—is consistent with the size of Japan's 1965 post-colonial settlement with South Korea. Given the puny size of the North Korean economy, this is a gigantic sum. See Manyin (2003) for further discussion.

25 The underlying sample consisted of 71 countries. In some applications, the sample size was reduced because of missing data on the explanatory variables.

**Figure 1: Hazard of Regime Change under Three Scenarios**

from statistics reported by the Bank of Korea (BOK).<sup>26</sup> The results from one such model are displayed in *Figure 1*. In this particular model, the hazard of political regime change is a function of per capita income, per capita income growth, openness to international trade, inflation, the share of trade taxes in total tax revenue, aid receipts per capita, and whether the country has a tropical climate (a proxy of institutional quality). (Stability is a positive function of income level and growth, trade openness, and aid and is a negative function of inflation, trade taxes, and institutional quality.)

According to this particular model, the probability of regime change peaked at nearly 10 percent in 1992, declined, peaked again in the late 1990s, and has since declined to approximately 4 percent in 2002, the most recent year in the simulation. (Other models reported in Noland [2004] generally yield higher probabilities though a similar time-series pattern.) Statistically speaking, one implication of these models is that those observers who, during the 1990s, predicted North Korea's collapse probably were not making such a bad bet—the cumulative likelihood of regime change in all of these models rises above 50 percent over the course of the decade.

<sup>26</sup> The quality of the data for North Korea is poor. The BOK estimate of North Korean national income is reportedly constructed by applying South Korean value-added weights to physical estimates of North Korean output derived through classified sources and methods; the estimate of national income reputedly was subject to pre-release interagency discussion within the South Korean government. This raises a variety of concerns: that the reliance on physical indicators may augur an overemphasis on the industrial sector (where output is relatively easy to count) relative to the service sector, that pre-release discussions may imply interagency bargaining and a politicization of the estimate, and that the methods through which the figures are derived are not subject to independent verification. The use of South Korean value-added weights is surely inappropriate. It is rumored that a classified mock North Korean input-output table exists, although what role this might play in the BOK's calculations is obviously speculative. For all of these reasons, outside analysts have at times questioned the reliability, if not the veracity, of the BOK figures. See the appendix to Noland (2004) for a more complete description of the data used in this analysis.

Another implication is that economic performance critically influences regime stability and that the North's external relations play a crucial role in this regard. To explore this theme, the models were simulated under three alternative scenarios:

- Under one scenario, which might be labeled "cooperative engagement," diplomatic tensions are eased, and North Korea successfully globalizes in a diplomatically supportive environment. Compared with the status quo, North Korea receives higher levels of aid from South Korea, China, the United States, and other countries. It normalizes diplomatic relations with Japan and begins to receive post-colonial-claims settlement payments. It joins the multilateral development banks and begins receiving aid from them as well. Total aid reaches \$3 billion annually. Under the less threatening environment, North Korea liberalizes its economy. The share of trade in national income rises to 71 percent, what it would exhibit if it were as integrated into the world economy as a "normal" country with its characteristics (Noland 2000, table 7.2), and trade taxes are cut to the South Korean level. The rate of economic growth rebounds to its 1999 peak of 6 percent. All other variables stay at their 2002 values.
- In the "neoconservatives' dream" scenario, the global community puts the squeeze on the Kim Jong-il regime. Aid is cut off. Growth falls to its previous low of -6 percent. The inexpertly enacted July 2002 economic policy changes drive inflation up to 300 percent, reputedly its rate over the course of the year since the introduction of the reforms.
- In the "international embargo" scenario, North Korea's relations with the rest of the world deteriorate precipitously, perhaps under suspicion of exportation of nuclear weapons, and all international trade is cut off. Admittedly, this scenario is a stretch for the underlying statistical model, which does not distinguish between food, oil, and video games in the maintenance of a society, and some might object that a total embargo is politically unrealistic as well. It may not be without some utility, however, revealing something about the nature of regime dynamics, at least in a cross-country sample.

For heuristic purposes, the predicted hazard rates associated with each of these alternatives are appended to the graph as "2003," although there is nothing unique in the scenarios to link it to that date, and, indeed, some of the changes envisioned in the cooperative-engagement scenario would probably take more than one year to realize. Nevertheless, the simulations may be revealing in terms of how outside forces might impact regime survival in North Korea.

According to these results, under the cooperative-engagement scenario, the likelihood of regime change falls to less than 1 percent. Kim Jong-il dies

in his sleep, and one of his sons dons his grandfather's crown. In the neoconservatives' dream, the likelihood of regime change rises to about a one-in-seven probability, growing thereafter, and in all probability Kim Jong-il is out of power before George W. Bush. (Remember, in the neo-con dream, George W. Bush is in power until 2008.) In the final scenario, international embargo, the likelihood of regime change is greater than 40 percent in the first year, and the Kim Jong-il regime probably collapses within two years. Hufbauer et al. (1990) find that sanctions aimed at destabilization succeed about half the time. When comparing the results obtained in this simulation with the historical track record, it should be kept in mind that the scenario modeled involves a successful complete embargo. An embargo that was less complete by design (i.e., allowing exceptions for certain categories of exchange) or less thoroughly implemented (i.e., there was cheating) would have an attenuated impact on regime stability.

One caveat should be underlined: there may be psycho-political phenomena that are not well captured by these models. In particular, foreign pressure may provide the regime with a rationale for poor performance while, conversely, a lack of foreign pressure (i.e., an absence of enemies) may deprive the regime of an excuse. This is simply to say that the models may overstate the impact of these alternative scenarios on regime stability—the good scenario may not be quite as good and the bad scenario not quite as bad as depicted in Figure 1, regardless of how one defines good and bad outcomes. Given the complexity of the underlying conceptual issues and the poor quality of the data used in the analysis, in statistician-speak these estimates could be thought of as coming with wide confidence intervals attached. Caveat emptor.

## Character of Successor Regimes

Suppose that the current regime is unable to manage this transition. Regime change—at least the internally generated variety—would not necessarily imply the disappearance of the North Korean state, though this is surely one possibility. The key issues would be the viability and character of the successor regime. Would any non-Kim Il-sung-ist North Korean regime be viable? Would it be able to legitimate itself, or would this simply be a transitional state toward unification? Is a post-*juche* North Korean state possible?

The current military-first ideological campaign, which at first blush would appear to signal the ascendance of the most reactionary element of the polity, may actually be the mechanism through which a broad-ranging top-down modernization of a society subject to external threat is justified. By elevating the military to the vanguard, the military-first ideology justifies all manner of departures from past practice—including the jettisoning of socialism in practice if not as a teleological ideal—in pursuit of military modernization.

There is historical precedent for this: in the Meiji Restoration as well as the founding of modern Turkey under Mustafa Kemal, revolutionary changes were justified as responses to external threats and legitimated in terms of restoring past historical glory. Yet in this North Korean production, Kim Jong-il would be playing the roles of both the Tokugawa Shogun and the Emperor Meiji. Perhaps this is consistent with Kim's comment to former U.S. secretary of state Madeleine Albright that he was interested in the "Thai model" in which he would reign but not rule (Albright 2003).

In a positive sense, top-down military-centered modernization may be a successful political development strategy. Of course, from a normative perspective, the results of that strategy—a nuclear-armed and possibly proliferating North Korea—may be antithetical to U.S. interests. And there is no guarantee that a military modernizer would be the Park Chung-hee or Augusto Pinochet of North Korea, and not its Alexander Kerensky or Lothar de Maizière. The legitimization challenges for a post-*juche* North Korea could be profound, and there is no certainty of success—even if the regime were supported by a South Korea fearful of the implications of collapse and absorption.

South Korea would be key, because of the resources that it could provide to a new North Korean regime and also because of the challenge that its very existence poses for the legitimization of any successor regime in North Korea. Ironically, one can imagine a situation in which the most radical forces in North Korea would be revolutionary nationalist unifiers who might well be opposed by a South Korean government that—fearing a collapse-and-absorption scenario—might try to prop up the North Korean state.

## Implications for South Korea

The collapse-and-absorption outcome would have tremendous economic and political ramifications for the South (and of course be accompanied by an enormous reduction in poverty in the North). Over the course of a decade, the "costs" of unification—the amount of capital investment needed in the North—might be on the order of \$600 billion. Although remaining positive, economic growth in the South would slow relative to a no-unification baseline, and, unless compensatory policies were undertaken, the process of economic integration with the North would lead to an increase in income and wealth inequality (Noland 2004).

Even less apocalyptic gradual integration scenarios pose significant challenges for South Korea as well. One can think of these as falling into three categories: real, institutional, and risk. With respect to the first, the real impact of gradual economic integration between North and South Korea in macroeconomic terms would be minor for the South—similar to the impact of NAFTA on the United States or the accession of small, central European countries to the European Union—although the impact might be profound

on particular South Korean firms or households. This would hold as long as economic integration was largely limited to goods markets—that is to say that markets for capital and labor would remain segmented.

A second channel of impact on South Korea would be institutional in nature. South Korea has considerable problems with nontransparent and corrupt government-business relations. In the North, there is no real difference between the state and the economy. Large-scale economic integration between the North and the South will be, by its very nature, a highly politicized process and will in all likelihood retard progress in cleaning up business-government relations in the South. Recent corruption scandals involving the Blue House and the Korean Development Bank with respect to Hyundai Asan's activities in the North are emblematic. There are alternatives—encouraging a more transparent and efficient approach to integration through tax policy, for example—but these have not been pursued by Seoul.

Finally, regardless of its economic progress or policy stance, South Korea remains exposed to the vagaries of North Korean behavior. Financially, South Korea is increasingly integrated into the world economy, creating new vulnerabilities. In 1994, during the previous nuclear crisis, foreign participation in South Korean financial markets was limited. Now, however, foreign institutions play a major role in South Korean financial affairs, and foreigners account for nearly 40 percent of the transactions on the Seoul stock exchange. Conversely, restrictions that impeded the ability of South Korean residents to invest abroad and hold non-*won*-denominated assets have been largely eliminated. Last, the use of complex off-balance-sheet transactions and financial derivatives, which did not exist in 1994, has expanded rapidly in recent years.

While it is true that the South Korean stock market actually rose during the 1994 nuclear crisis, the expanded role of foreign participants and the increased complexity of the financial transactions mean that the market today is far less susceptible to political intervention than it was a decade ago.

The popular image of capital flight occurring when foreigners flee for the exits is belied by historical experience the world over—almost invariably it is the better-informed locals who are out the door first. During periods of uncertainty, BOK data reveal that, while foreigners were net buyers in the stock market, South Koreans were net sellers, although to date these incidents appear to have amounted to flights to quality—funds shifted into government-insured bank accounts and not into offshore assets. And while President Roh Moo-hyun has been justly praised for mobilizing young people for political participation, the converse is also true: President Roh's support is relatively weak among older South Koreans, who are the predominant owners of the country's savings and who evince the greatest wariness with respect to North Korea.

## Conclusions

North Korea launched economic reforms in July 2002. The results to date have been uneven, and it is by no means preordained that even additional reforms more adroitly implemented will deliver success in the short run. The three robust predictors of success in transitional economies are the degree of macroeconomic stability at the time that reform is initiated, the legacy of a functional pre-socialist commercial legal system, and the size of the agricultural sector (Sachs 1995, 454–85; Åslund et al. 1996). North Korea is already experiencing significant macroeconomic instability, and, in terms of the sectoral composition of output and employment, the North Korean economy resembles Romania and parts of the former Soviet Union more closely than it does the agriculture-led Asian reformers, China and Vietnam.

Moreover, from a broader perspective, the reforms may well be setting in motion social forces that will prove politically destabilizing. From an ideological perspective, the current military-first campaign could be regarded as the opening of a reinterpretation of *juche* that would emphasize modernization over socialism and provide the regime with an ideological rationale for reform. The regime can also draw upon two generations of unparalleled political indoctrination, a complete monopoly on social organization, and a massive apparatus for internal social control that it deploys ruthlessly.

That said, the problem of social control is surely aggravated by the divided nature of the Korean peninsula and the cognitive dissonance created by a prosperous and democratic South Korea. Ironically, this problem is intensifying as the reforms are having the presumably unintended effect of exposing the isolated North Korean populace to an increasing amount of information originating beyond the borders.

Yet even if the North were able to successfully navigate these shoals domestically, it is hard to see the initiative coming to fruition as long as the country remains, in essence, a pariah state, brandishing its nuclear weapons and missiles, subject to diplomatic sanctions. The signs on this front are inauspicious. In January 2004 the world was treated to yet another round of North Korean brinkmanship: the display to visiting Americans of an empty spent-fuel pond at the Yongbyon nuclear site and a substance alleged to be reprocessed plutonium. The North Koreans seem to be content to pressure the United States: as time passes, their nuclear activities proceed, and after a year—after the 2004 U.S. presidential elections—they hope to face a more pliant set of interlocutors.

Nor does it appear that the Bush administration is in any rush to negotiate seriously. Reluctant in an election year to request a congressional appropriation to compensate North Korea for reneging on past promises, the administration instead appears to be content to bide its time, hoping for a North Korean collapse.

Those hopes may well be in vain. North Korea's reforms may ultimately generate unmanageable social changes, but, in the short run, subject to serious caveats about the ambition of the modeling exercise and the quality of the underlying data, the statistical analysis discussed in this paper indicates that today the odds on regime change are not particularly high, perhaps on the order of 5 percent in any given year, down roughly half from its previous peak. Cumulated over a decade, those odds shorten quite appreciably, but neither the Bush administration nor the world community can afford to wait a decade to end the North Korean nuclear program. If the Bush administration seeks regime change in North Korea, it will have to give history a shove. North Korea is unlikely to collapse anytime soon under current conditions.

No coercive plan can succeed without South Korean support—South Korean resources could frustrate any plan to strangle North Korea economically, and lack of South Korean political support for such a scheme would give China and others the diplomatic cover to defect.

Yet today a growing majority of South Koreans, accustomed to living for decades in the shadow of the North's forward-deployed artillery, do not regard the North as a serious threat. Growing prosperity and confidence in the South, in marked contrast to the North's isolation and penury, have transformed fear and loathing into pity and forbearance. Instead, it is the United States, an ocean away, that regards the North and its nuclear weapons program with alarm. As the United States has focused on the nuclear program, its ally, South Korea, has observed the North Koreans' nascent economic reforms, heard their talk of conventional-forces reduction, and perceived that the gap in the two countries' respective assessments of the North Korean threat has patently widened. *Chosun Ilbo* on 12 January 2004 reported on a recent public opinion poll in which more South Koreans identified the United States as the principal threat to peace than those who specified North Korea. The younger the respondent and the higher the level of educational attainment, the wider is this gap. Fifty-eight percent of respondents in their twenties and 52 percent of students and white-collar workers polled singled out the United States as the primary threat to peace. Another survey (Bong 2003) found that more than three-quarters of South Korean students polled actually supported North Korea's development of nuclear weapons.

In these circumstances, a prerequisite for the successful application of a U.S.-led strategy of multilateral coercive diplomacy will be to convince the South Korean government and public of the correctness of the U.S. case. This will be an uphill battle.

The indispensable first step—to either eliminate the North Korean nuclear program through negotiation or to establish the diplomatic precursors to eliminate it through other means—is the reengagement of the six-party talks. There were no breakthroughs at the second round of talks in February 2004 although the participants did agree to a face-saving proposal to establish

technical-level working groups. Most commentary pinned the lack of obvious progress on the inflexibility of the United States and/or North Korea. The subsequent political turmoil in South Korea around the impeachment of President Roh further dims the likelihood of progress in the short term.

The historical record of countries forgoing nuclear weapons is subject to multiple interpretations. Three of the four cases in which states gave up nuclear weapons (Ukraine, Belarus, and Kazakhstan) were clearly associated with regime change—in all three cases, newly installed governments seeking to assert democratic credentials and gain international acceptance voluntarily surrendered weapons left over from the Soviet Union, albeit supported with technical and financial assistance from the international community. The fourth example, that of South Africa, is somewhat more complicated. The apartheid-era government of F. W. de Klerk made the decision to surrender its weapons in 1990, before a regime change in the context of a reduced external threat from Soviet proxies in southern Africa after the collapse of the Soviet Union, because of concerns about the use of weapons by a post-apartheid successor regime, and, as in the cases of three former Soviet republics, in a bid to gain international legitimacy and acceptance.

The list of states that have terminated programs before actually fabricating weapons is longer and includes South Korea, among others. Again, the joint decision in 1988 by Argentina and Brazil to halt their programs occurred in the context of newly installed democratic regimes asserting their authority over their militaries by reversing decisions undertaken by preceding military governments.

The most recent case, that of Libya, is interesting in that it appears to deviate from the pattern of terminating nuclear weapons in the context of internal regime change, although it does highlight the role of gaining international acceptance, and it provides some obvious similarities—and differences—compared with the case of North Korea. Like North Korea, the Qadhafi regime has a history of bad relations with the United States, starting with Libya's support for international terrorist groups following the coup d'état that brought Qadhafi to power in 1969 and Libya's placement on the U.S. government list of state sponsors of terrorism in 1979. Relations worsened following a military air engagement in 1981 and the imposition by the United States of economic sanctions the following year. In 1986, in response to evidence of Libyan involvement in a bombing in Germany that killed two U.S. servicemen, the United States launched air strikes in which Qadhafi's home was targeted and an infant adopted daughter killed.<sup>27</sup> Libya retaliated

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27 Qadhafi's security concerns, though perhaps understandable, verge on the paranoid: he seldom travels by air outside Libyan airspace and instead wheels around the Maghreb in a massive convoy of 4×4 vehicles, carrying his own food and water and providing his hosts no more than a couple of days' notice of his imminent arrival. I should know: in March 2003, I was expelled on a few hours' notice from my hotel in Bamako, Mali, to make way for the peripatetic Col. Q. and his massive entourage.

by bombing a U.S. airliner over Scotland in 1988. It had earlier bombed a French airliner over Chad.

The Libyan decision to end its nuclear program comes in the context of external events, most notably the U.S.-led destruction of Saddam Hussein's regime in Iraq as well as a broad Libyan attempt to come in from the cold, concluding agreements to resolve issues associated with the airline bombings. Moreover, Libya does not possess nuclear weapons—only a nuclear weapons program—so presumably the value of the program, and the cost of surrendering it, are less to the government compared with actual weapons.

In 2003, when a shipment of uranium enrichment equipment bound for Tripoli was interdicted, Qadhafi's response was contrite, in stark contrast to Pyongyang's bellicose defiance (Sokolski 2004). After making the decision to forgo nuclear weapons, Qadhafi made an appeal to other countries, including North Korea, to follow the Libyan example. The North Korean foreign ministry, as reported by the KCNA on 9 January 2004 (in an article entitled "Spokesman of DPRK FM Dismisses Any Change from DPRK as Ridiculous"), in its inimitable style responded that "[t]his is the folly of imbeciles. . . . To expect any 'change' from the DPRK stand is as foolish as expecting a shower from the clear sky."

Even if one is dubious about the prospects of eliminating the North Korean nuclear program through negotiation with a Kim Jong-il regime—and there are myriad reasons for skepticism—earnest and sincere participation in the talks is essential to place on Pyongyang the onus for the failure to make consensual progress and thereby secure South Korean (as well as Chinese) support for more coercive measures.

In the meantime, while the global community has an ethical obligation to feed hungry North Koreans, it has no obligation to do so in ways that strengthen a totalitarian regime that is itself the source of the problem. Specifically, if the world community is serious about addressing the humanitarian crisis in North Korea, it should be willing to fund a multilateral initiative to create temporary refugee feeding and resettlement camps in China, modeled on the response to the Vietnamese boat-people crisis two decades ago. Governments like those of the United States and the European Union, which censure North Korea on human rights grounds (UN 2003), should be willing to put their money (and their refugee resettlement policies) where their mouths are.<sup>28</sup> China has an understandable wariness of a flood of Korean refugees, and those who criticize China for its treatment of North Korean refugees should be willing to go beyond mere criticism and formulate constructive solutions that would address both the underlying humanitarian disaster in the DPRK and China's understandable domestic political concerns. The North Korean Freedom Act, introduced into the U.S. Senate in

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28 Regrettably, Japan and South Korea (the latter abstained from the UN human rights vote on North Korea) have the worst refugee resettlement records among OECD member countries.

November 2003 by Senators Sam Brownback (R-KS) and Evan Bayh (D-IN) and in the House by Representatives by Jim Leach (R-IA), Eni Faleomavaega (D-AS), and Chris Smith (R-NJ), would go part way by making it easier for North Koreans to get refugee status and enter the United States, and it puts pressure on the administration to encourage China to live up to its obligations under UN refugee covenants. It would not, however, address the core underlying issue of how to take North Korean refugees off China's hands permanently.

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