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The North Korean Economy: Leverage and Policy Analysis

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The North Korean Economy: Leverage and Policy Analysis

Summary

North Korea's dire economic straits provides one of the few levers to move the Democratic Peoples Republic of Korea (DPRK) or North Korea to cooperate in attempts by the United States, China, South Korea, Japan, and Russia to halt and dismantle its nuclear program. These five countries plus North Korea comprise the "six parties" who are engaged in talks, currently restarted, to resolve issues raised by the DPRK's development of a nuclear weapon. This report provides an overview of the North Korean economy, its external economic relations, reforms, and U.S. policy options.

In June 2008, the Bush Administration announced that it was lifting restrictions under the Trading with the Enemy Act and was starting the process to remove the DPRK from the list of State Sponsors of Terrorism. Other sanctions, including U.N. sanctions imposed following North Korea's nuclear test, still remain in place.

The economy of North Korea is of interest to Congress because it provides the financial and industrial resources for the Kim Jong-il regime to develop its military and to remain in power, constitutes an important "push factor" for potential refugees seeking to flee the country, creates pressures for the country to trade in arms or engage in illicit economic activity, is a rationale for humanitarian assistance, and creates instability that affects South Korea and China in particular. The dismal economic conditions also foster forces of discontent that potentially could turn against the Kim regime — especially if knowledge of the luxurious lifestyle of communist party leaders becomes better known or as poor economic performance hurts even the elite.

Economic conditions in North Korea have been improving since the disastrous conditions in the mid-1990s but still are dismal for those out of the center of power. Crop failures and flooding have reportedly increased the potential for mass starvation in 2008, although progress in the Six Party Talks have open the way for deliveries of humanitarian assistance from the United States and South Korea. The DPRK has embarked on a program of limited economic reforms that include allowing open markets, allowing prices to better reflect market values, reducing dependence on rationing of essential commodities, trimming centralized control over factory operations, and opening areas for international investment.

North Korea has extensive trading relationships with China and South Korea and more limited trade with Russia. Because of economic sanctions U.S. and Japanese trade with North Korea in 2006 and 2007 was virtually nil. The DPRK has been running an estimated $1.5 billion deficit per year in its international trade accounts that it funds primarily through receipts of foreign assistance and foreign investment as well as through various questionable activities.

This report will be updated as conditions warrant.

Contents

List of Figures

List of Tables

The North Korean Economy: Leverage and Policy Analysis

Major Points and Recent Developments

- The economy of the DPRK (North Korea) is one of the few policy levers that countries can use to induce Pyongyang to abandon its nuclear program.

- The economy of the DPRK is in dire straits with a considerable share of its population on the edge of starvation and in need of outside food aid. In 2008, Pyongyang is placing more emphasis on feeding its people. This likely is one reason that North Korea has been more cooperative in disclosing and ending its nuclear weapons program.

- China and South Korean investments and trade with the DPRK are helping the country to secure needed imports of energy, food, and machinery for factories. North Korea's trade deficit is being financed primarily through foreign aid, investments, and remittances from overseas workers, as well as through various illicit activities.

- Other than recent financial sanctions, economic sanctions appear to have had little effect on the Pyongyang regime because China, Russia, South Korea, and other nations have traded and provided assistance to the DPRK, and the Kim Jong-il regime seems willing to allow starvation rather than open the country to outsiders. A fall of the Kim Jong-il regime seems unlikely at this time, although pressures apparently are building in some quarters in North Korea to look beyond the aging leader Kim.

- Economic reforms ("adjustments") in the DPRK are gradually being implemented, but the pace is slow and reversals of reform measures are frequent.

- A February 2007 Six-Party Agreement calls for providing fuel and eventual normalizing of relations with the DPRK in response to specific actions by Pyongyang in regard to its nuclear program.[1]

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[1] For details on the Six-Party Talks, see CRS Report RL33590, *North Korea's Nuclear Weapons Program*, and CRS Report RL33567, *Korea-U.S. Relations: Issues for Congress*, both by Larry A. Niksch.

- H.R. 2764 (P.L. 110-161) appropriated $53 million for energy assistance for North Korea. In May 2008, the Bush Administration announced it would resume food assistance to North Korea by providing 500,000 metric tons.[2]

- Options for Congress include increasing its role in the Six-Party Talks through oversight, hearings, legislation, and policy discussions with the Executive Branch; continuing with the status quo (primarily a State Department effort) including an emphasis on human rights, non-proliferation, and actions to counter illicit activities; or to take a more rigid stance toward Pyongyang until it fulfills its commitments under the 2007 Six-Party Agreement.

Recent Events

- On July 11, 2008, Park Wang-ja, a 53-year-old housewife, was shot dead by a North Korean soldier while taking a pre-dawn stroll near a South Korea-managed resort on Mount Kumkang in North Korea. South Korea halted further tourist visits to the mountain resort (worth about $10 million per year to North Korea). (There is some speculation that this could be the DPRK military's attempt to derail denuclearization under the Six-Party process.)

- On July 12, 2008, North Korea agreed to disable its nuclear facilities by the end of October and, in return, the other parties pledged to provide promised energy aid to the North by that time.

- In June 2008, the DPRK disclosed additional detail on its nuclear program. The Bush Administration announced that it was lifting restrictions under the Trading with the Enemy Act and was starting the process to remove (August 11, 2008, at the earliest) the DPRK from the list of State Sponsors of Terrorism. Other sanctions, including U.N. sanctions imposed following North Korea's nuclear test, remain in place.

Introduction

On June 26, 2008, President Bush announced the lifting of the application of the Trading with the Enemy Act (TWEA) with respect to the Democratic People's Republic of Korea (DPRK, or North Korea), and notified Congress of his intent to rescind North Korea's designation as a State Sponsor of Terrorism.[3] According to

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[2] For information on U.S. aid to the DPRK, see CRS Report RS21834, *U.S. Assistance to North Korea*, by Mark E. Manyin and Mary Beth Nikitin.

[3] U.S. Department of State. "North Korea: Presidential Action on State Sponsor of Terrorism (SST) and the Trading with the Enemy Act (TWEA)." Fact Sheet, June 26, 2008. This began the clock on a 45-day period of prior notification of Congress (ending August

(continued...)

the State Department, these actions were taken following the DPRK's submission of a declaration of its nuclear programs as agreed to under the Six Party Talks. The Secretary of State is able to (but has not yet) rescind North Korea's designation as a State Sponsor of terrorism (as of August 11, 2008, following the 45 day period in which Congress could have passed a joint resolution blocking the proposed rescission). The United States reportedly is waiting for more complete verification of the DPRK nuclear program.[4]

Recent progress being made under the Six Party Talks on the denuclearization of the Korean Peninsula also enabled the United States to resume shipments of humanitarian aid to North Korea. A shipload of food and another of heavy fuel oil arrived in North Korea shortly after the announcement by President Bush of the above actions.

In 2008, the confluence of several forces is complicating the economic situation faced by Pyongyang. The first is the global food shortage and concomitant high prices combined with a poor crop outlook for farms and halting recovery in industries within North Korea. The second is the hardening of attitudes by the new South Korean President Lee Myung Bak who has declared an end to unrequited South Korean economic assistance to the North and reciprocal criticism of the South by Pyongyang. These negative factors are offset somewhat by progress being made in North Korea's relations with Japan over the problem of abductees (Japanese citizens kidnapped by the DPRK) that may lead to a normalization of relations and a large payment by Japan of reparations to the DPRK for Japan's occupation of the Korean peninsula and also by investments in North Korean industrial production by China in the northern region and by South Korea primarily in the Kaesong Industrial Complex. These investments have created new exports for the DPRK. The progress under the Six-Party Talks and the apparent willingness on the part of both the United States and the DPRK to compromise in order to move the Six Party Agreement on denuclearization forward has opened the way for deliveries of U.S. humanitarian aid, and if sanctions are lifted, for possible Western investment

North Korea at a Glance

Land Area: 120,540 sq km, slightly smaller than Mississippi
Population: 23.3 million (2007 est.)
Head of State: Kim Jong-il
Capital: Pyongyang
Life expectancy: 72 years
GDP: estimated $40-$71 billion at purchasing power parity in 2007
GDP Per Capita: $1,900 (CIA) to $3,094 (Global Insight) at PPP in 2007
GDP Composition: agriculture: 30% industry: 39%, services: 31%
Exports: $1.9 billion (2007)
Export Commodities: minerals, metallurgical products, manufactures (including armaments), textiles, and fishery products
Imports: $3.2 billion c.i.f. (2007)
Import Commodities: petroleum, coking coal, machinery and equipment; textiles, grain

Sources: CIA, *World Factbook*; Global Insight. CRS calculations for trade.

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[3] (...continued)
11) for delisting North Korea as a state sponsor of terrorism.

[4] Kellerhals, Merle D., Jr. "North Korea Must Provide a Verification Plan, U.S. Officials Say." U.S. Department of State. Available at [http://www.america.gov].

in North Korea. The outlook for growth in 2008 is for an increase in real gross domestic product of about 2.1%, down slightly from the 2.4% in 2007.[5]

The Stalinist state of North Korea (Democratic People's Republic of Korea or DPRK) faces a dilemma as its economy stagnates, goods are unequally distributed, and much of the population undergoes severe privation. In the ongoing Six-Party Talks on the DPRK's nuclear weapons, economic assistance has been the primary incentive for Pyongyang's leaders to proceed with commitments relating to the closure of its nuclear weapon's program despite resistance from domestic interests (particularly the military).

North Korea's leaders seem to perceive themselves as being in a policy dilemma. They see the United States as a hostile power and perceive themselves as a possible target of U.S. military action. They have pushed to become a nuclear power despite warnings not to do so even from China, their major ally. Yet North Korea's nuclear weapon development has become a rallying point for national pride and what they see as a deterrent against hostile action. Yet a January 2008 joint newspaper editorial by the Communist Party, military, and youth militia stated that "at present, no other task is more urgent or more important than solving the people's food problem and eating problem."[6] In January 2008, Kim Jong-il reportedly stated, "The most important and urgent issue for us now is to bring about a turnabout in the building of the economy and in the lives of the people."[7] Pyongyang currently faces the archetypical economic trade-off between "guns and butter," but in their case the question is whether to retain the "guns" (nuclear weapons) or give them up in order to obtain "butter" (food imports).

In negotiating with the DPRK, the United States has five major policy levers: international political pressure, economic assistance, economic sanctions, diplomatic isolation, and the threat of preemptive military action. This report examines the economic side of U.S. leverage with North Korea. The security side is addressed in other CRS reports.[8] Here we provide an overview of the North Korean economy, survey its economic relationships with major trading partners, and conclude with a discussion of U.S. policy options.

Information on the DPRK's economy is scanty and suspect. The closed nature of the country and the lack both of a comprehensive data-gathering structure using modern economic concepts and a systematic reporting mechanism make quantitative assessments difficult. Still, sufficient information is available to provide a sketch of the North Korean economy that has enough details to address different policy paths.

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[5] Global Insight (subscription econometric forecasting service). "North Korea" (updated July 23, 2008).

[6] Full text of North Korea's 2008 New Year's joint editorial, BBC Monitoring Asia Pacific. London. January 2, 2008. p. 1.

[7] Kim Ung-ho. Main Attack Front in Building a Powerful State. *Rodong Sinmun*, January 19, 2008. Translated Open Source Center, document # KPP20080119029003.

[8] See CRS Report RL33590, *North Korea's Nuclear Weapons Program*, and CRS Report RL33567, *Korea-U.S. Relations: Issues for Congress*, both by Larry A. Niksch.

U.S. interest in the moribund North Korea economy goes beyond the leverage that economic assistance provides in negotiations over Pyongyang's nuclear weapons. The economy provides the financial and industrial resources for Pyongyang to support its military and nuclear weapons program. It constitutes an important "push factor" for refugees seeking to flee the country. It creates pressure for the country to engage in illicit trade. When the economy is performing poorly, it diverts international food aid that could be used elsewhere and creates instability that raises the risk of desperate action by Pyongyang. Dismal economic conditions may foster forces of discontent in the DPRK that potentially could turn against the ruling regime of Kim Jong-il — especially if knowledge of the luxurious lifestyle of regime leaders and the higher standard of living in South Korea spreads or if the poor economic performance hurts even Pyongyang's elite. Despite over a decade of hardship, however, most dissatisfaction or opposition to the regime seems to be muted.

This CRS report notes that the worst of North Korea's economic crisis reached in the mid-1990s seems to have passed, but the economy is still struggling and heavily dependent on foreign assistance to stave off starvation among a sizable proportion of its people. In a 2008 survey, the U.N. World Food Programme (WFP) found that food availability, accessibility, and utilization have deteriorated sharply since 2007; close to three quarters of the households have reduced their food intake; and that more malnourished and ill children are being admitted to hospitals and institutions. The conclusion was that millions of people in the DPRK are experiencing hunger not seen in almost a decade.[9] Severe floods in 2007 worsened a situation that had been improving. So far, deliveries of food aid, Pyongyang's reforms, and increasing trade with South Korea and China have enabled the country to bridge to some extent its shortfall between food production and basic human needs. U.N. trade sanctions along with U.S. financial sanctions may have had some effect, judging by the complaints coming out of Pyongyang and progress in the Six-Party Talks. U.S. trade sanctions alone, however, tend to have little impact because the United States already has virtually no trade with the DPRK. The country can turn to other nations for needed imports, and sanctions do not halt humanitarian aid shipments.

The Six-Party Agreement of February 13, 2007, included an economic incentive of heavy fuel oil and humanitarian food aid, as well as the prospect of the normalization of diplomatic relations between the DPRK and the United States and Japan in exchange for North Korea's freezing and allowing inspections of the activity at its Yongbyon nuclear reactor. The Agreement is being implemented on the basis of action-for-action.

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[9] U.N. World Food Program. DPRK Survey Confirms Deepening Hunger for Millions. New-Press Release, July 30, 2008.

Overview of the DPRK Economy

The North Korean economy is one of the world's most isolated and bleak.[10] It was completely bypassed by the Asian "economic miracles" of the past three decades that brought modern economic growth and industrialization to South Korea, Taiwan, Singapore, and Hong Kong, as well as rapid growth and trade liberalization to China, Thailand, Malaysia and other Asian nations. The "Stalinist" North Korean economy can be characterized by state ownership of means of production; centralized economic planning, command, and monitoring of political attitudes; and an emphasis on military development. The economic system is designed to be self-reliant and closed. The irony of the situation is that the longer the economy tries to remain self-sufficient, the poorer its performance and the more dependent the country becomes on the outside world just to survive.

During the 1990s, major portions of the North Korean population survived primarily through transfers of food and other economic assistance from abroad. The worst of the food crisis has passed, but shortages are still there, and the country depends on staples from China, South Korea, and, when allowed, from the U.N. World Food Program to stave off mass starvation.[11]

During the 1990s, the inefficiencies of North Korea's centrally planned economy, especially its promotion of state-owned heavy industries, along with high military spending — about 15-25% of GDP — joined with drought and floods to push the economy into crisis. In addition, the collapse of the Soviet bloc meant the loss of Russian aid, export markets, and cheap oil. Trade with the former Soviet Union dropped from as much as $3.58 billion in 1999 and has recovered to only $230 million (mostly petroleum) by 2005.[12] This added to disastrous domestic economic conditions in North Korea.[13] Food has been so scarce that North Korean youth are shorter than those in other East Asian nations.[14] Since 1998, the military reportedly has had to lower its minimum height requirement in order to garner sufficient new recruits. Life expectancy has been contracting. With the help of the WFP, which had been feeding more than a quarter of North Korea's 23 million people, chronic malnourishment among children reportedly fell from 62% in 1998 to about 37% in 2004. About one-third of mothers are considered to be both

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[10] For an in-depth study of the North Korean economy, see Marcus C. Noland, *Avoiding the Apocalypse: The Future of the Two Koreas*, Institute for International Economics, 2000.

[11] In January 2008, a program for recovery assistance for vulnerable groups in the DPRK lasting from April 2006 to May 2008 had appealed for $102,234,076 and had received 56% of the income against that appeal. The largest donors were South Korea, Russia, Switzerland, Germany, and Australia. World Food Program. Resourcing Update, Project No. 10488.0, January 15, 2008.

[12] Data from Global Insight. Subscription database.

[13] Global Insight. Korea, North: Economic Trends: Economic Growth: Background. March 4, 2003.

[14] Chao, Julie. Economic Devastation Visible in Pyongyang. Korea Is like a Land Time Forgot, and Crisis with U.S. Isn't Helping. *The Austin American Statesman*, May 3, 2003. P. A17.

malnourished and anemic.[15] The Food and Agriculture Organization of the United Nations estimated that 7.6 million North Koreans were undernourished in the 2002-2004 period.[16] North Korea refers to this period of hardship as the "arduous march," an apparent comparison to the "long march" in Chinese revolutionary history. In January 2006, Pyongyang ordered the WFP to stop food deliveries to the DPRK, but limited food assistance (about 75,000 tons annually) was resumed after an agreement in May 2006.[17] Over the winter of 2007-2008, the abnormally dry and cold weather reportedly has seriously affected the growth of autumn wheat and barley. When combined with severe flooding during the summer of 2007, the WFP predicted the DPRK will be short about 1.4 million tons of food in 2008.[18]

An extensive analysis of the famine in the 1990s concludes that the "ultimate and deepest roots of North Korea's food problems must be found in the very nature of the North Korean economic and political system."[19] Since 2002, Pyongyang has allowed some reforms that may ease the economic pressures over the long term. In a sense, these reforms legitimized what was already occurring following the collapse of the centrally planned economy.[20] The Kim regime refuses to call the economic measures "reforms," but as will be discussed later in this report, that in essence is what they are. North Korea prefers to characterize the reforms as "utilitarian socialism." This includes the introduction domestically of market economy elements (called the July 1, 2001 measures) and in the international arena, the pursuit of normalization of relations with countries that have traditionally been hostile toward their country.

The DPRK's gross national product in 2007 in purchasing power parity prices (PPP) — prices adjusted to international levels — has been estimated at $40 billion (CIA estimate). This amounts to national income of about $1,800 to $2,964 per capita in PPP values or roughly in the range of that of Zimbabwe, Uzbekistan, Bangladesh, or the Sudan. This is considerably lower than that of China ($6,572),[21] Indonesia ($3,842), or Japan ($30,821). It is also dramatically lower than South

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[15] Watts, Jonathan. Where Are You, Beloved General? In a Land Where Paranoia, Propaganda, and Poverty Are the Norm, an Albino Raccoon Reassures North Koreans That Good Times Are Ahead. *Mother Jones*, Vol. 28, No. 3, May 1, 2003. p. 52.

[16] Food and Agriculture Organization. Food Security Statistics. Online at [http://www.fao.org/statistics/faostat/foodsecurity/Files/NumberUndernourishment_en.xls].

[17] U.N. World Food Programme. WFP Set to Resume Operations in North Korea, Press Release, May 10, 2006.

[18] Kim, Hyung-jin. North Korea Winter Threatens Food Supply, Associated Press, Seoul, March 3, 2008.

[19] Stephan Haggard and Marcus Noland. *Famine in North Korea, Markets, Aid, and Reform* (New York: Columbia University Press, 2007). P. 3.

[20] Georgy Toloraya. The Economic Future of North Korea: Will the Market Rule? Korea Economic Institute, Academic Paper Series, Volume 2. No 10, December 2007.

[21] A recent World Bank Study indicates that China's PPP values should be reduced by about 40% for 2005 and subsequent years. World Bank. *2005 International Comparison Program, Preliminary Results*, December 17, 2007.

Korea's $21,868 in PPP values or $16,200 at market prices.[22] According to the Bank of Korea, in market prices, North Korea's GDP in 2006 was an estimated $25.6 billion compared with $888 billion for South Korea. Global Insight, an econometric consulting firm, estimated North Korea's GDP in 2006 at $22.9 billion ($23.9 billion in 2007).[23] A remarkable fact is that in the post-Korean War and into the mid-1970s, living standards were higher in North Korea than in either South Korea or China. Now, North Korea is far behind its rapidly growing neighbors.

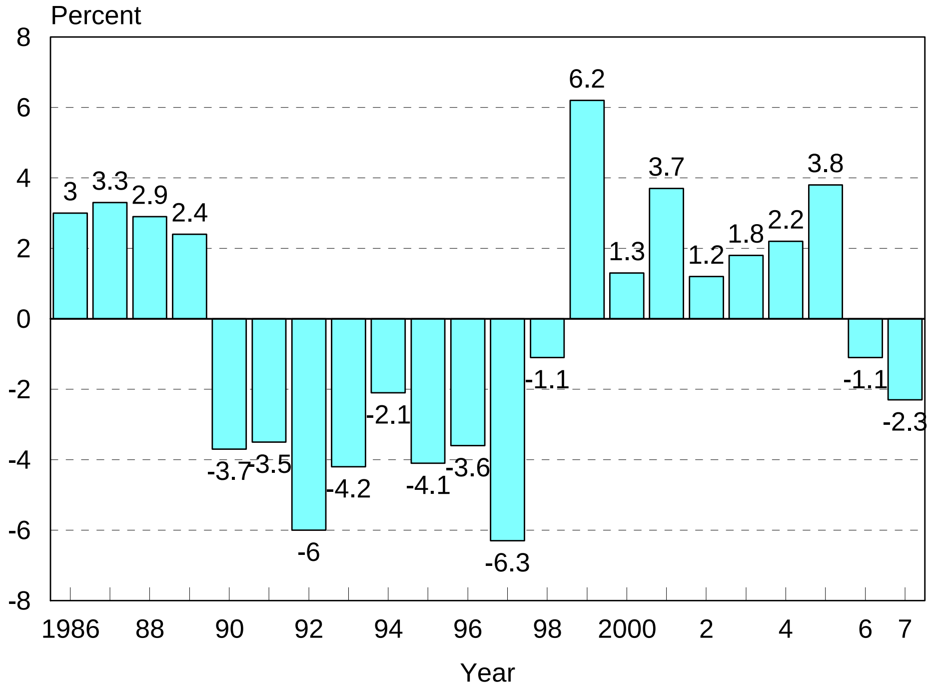
As shown in **Figure 1**, growth in estimated real gross domestic product (GDP) in the DPRK was dropped into the negative for most of the 1990s before beginning to recover in 1999. In 2004 to 2006, growth has been continuing at about 2%, up slightly from earlier years. In 2006, the economy shrank by 1.1% and continued to decline in 2007 by an estimated 2.3%. In essence, the economy appears to have recovered moderately after the 1990s but has contracted again over 2006-2007.

It should be noted that various scholars and government officials produce a variety of estimates of North Korean growth rates and GDP. Some estimates show gradual recovery, but others argue that real per capita GDP has been stagnant or even declining over the past decade. One problem is that estimates of inflation are difficult to obtain and are inherently unreliable. The reason is that households in different sectors of the economy may pay different prices for the same commodities — particularly staples that have been distributed through official channels to some but must be purchased in markets by others. Rice, for example, may be sold in an official market for one price, sold in an irregular market for another, or distributed as a ration to certain households basically for free. Another problem is that officials who report data often are under pressure to meet certain targets. Unlike in the West where data may be "sugar coated" to make them more palatable, in the DPRK, the underlying statistics often are "rubberized." They may be stretched or compressed according to official expectations.

[22] PPI figures are from the World Bank. *World Development Indicators.*

[23] Global Insight (subscription service), "North Korea, Economic Growth: Outlook," updated July 23, 2008.

Figure 1. Estimated Real Annual Growth in North Korea's GDP 1986-2007



Source: Data from Bank of Korea

Another problem with North Korean data is that there is a huge difference between the official exchange rate and the free market rate. This problem is avoided in PPP estimates that compare purchasing power and adjust for exchange rate differences. In estimates of GDP expressed in dollars, however, the exchange rate is used to convert North Korean won to U.S. dollars. According to Global Insight, the official exchange rate in North Korea has been 2 per dollar while the free market rate has ranged between 200 to3,000 won per dollar.[24]

What can be said for certain is that a sizable part of the DPRK population lives on the edge of existence. In few countries today does a small decline in GDP or summer flooding cause massive starvation and growth stunting as it does in the DPRK. Also, despite the threat of imprisonment for crossing the border into China and being repatriated to North Korea, a large number of refugees still attempt to flee the economic and political conditions in the country.

In this land of scarcity, consumer necessities have been rationed and used to reward party loyalists. Under Pyongyang's economic reforms, this system appears to be phasing out, but in the fall of 2005, North Korea backtracked on some of its economic reforms by forbidding private sales of grains and reinstituting a centralized food rationing system. Pyongyang also reportedly closed its food markets but then opened consolidated markets that carried food and other items.

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[24] Global Insight (subscription econometric forecasting service), "North Korea." (Updated July 23, 2008).

The combination of a weak economy unable to provide basic food and necessities and a ruling regime intent on maintaining its power has created economic divisions within society. North Korea reportedly officially classifies its citizens into three ranks and fifty-one categories based on their ideological orientation. However, in actuality, the economy has created five classes of people. The official categories are used to allocate rations for daily necessities, jobs, and housing.[25] The *de facto* categories have resulted from the intrusion of market forces and trading on the official class divisions.

The top class consists of the elite who claim the first rewards from society. They are the party cadres who are leaders in the military and bureaucracy and who enjoy privileges far above the reach of the average household. While starvation haunts the provinces, many of the privileged class live in Pyongyang (where provincial North Koreans cannot enter without special permission); some drive foreign cars, acquire imported home appliances, reside in apartments on a lower floor (so they do not have to climb too many stairs when the electricity is out), and buy imported food, medicines, and toiletries at special hard currency stores.[26] The elite have a strong vested interest in maintaining the current economic system, despite its problems. Their incomes originate from the treasury, from foreign investors (mostly South Korean), remittances from ethnic Koreans in Japan (although these have been curtailed), and the country's shadowy trade in everything from missile technology to fake banknotes and narcotics.[27]

After the elites surrounding Kim Jong-il, the second group comprises business traders with access to foreign capital and international transactions; the third consists of "organized thugs" who make their money through public trading and markets. The fourth class is composed of urbanites and others who scrape by on government rations, while the fifth class is farmers who support their way of life through farming private plots and selling goods in markets.[28]

Despite hushed grumbling about economic deprivation, forced food deliveries to the central government, a rationing system with insufficient stocks to deliver, and new prohibitions on markets that are difficult to understand and rationalize, dissent in North Korea remains stifled. Support for the ruling regime appears strong — even among the lower classes of people — although this support is often enforced by severe squashing of even the slightest hint of dissent. Even suspicious comments in casual conversations may be reported to the authorities. The country is far from developing a middle class with independent economic means, personal sources of information, and a thirst for more democratic institutions.

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[25] South Korea. Ministry of Unification. *North Korea Today*, August 14, 2001 (Internet edition).

[26] UN World Food Programme. World Hunger — Korea (DPR). Available at [http://www.wfp.org/country_brief/indexcountry.asp?country=408].

[27] Desperate Straits, Special Report (1). *The Economist*, May 3, 2003 (U.S. Edition).

[28] Class Divergence on the Rise as Market Economics Spread in DPRK, Institute for Far Eastern Studies, North Korea Brief. September 21, 2007. Cited in NAPSNet, September 21, 2007.

In 2007, South Korea's new President Lee Myung-bak stated in his plan, "Vision 3000: Denuclearization and Openness," that if North Korea denuclearizes and opens, his administration will help to make North Korea's national income $3,000 per person within ten years. The plan, however, does not provide an alternative if North Korea does not denuclearize.[29]

Economic Philosophy

The Pyongyang regime has pursued a policy of self-sufficiency and isolation from the world economy that they call *juche* or self-reliance. *Juche* goes beyond economics as it has been used since the 1950s to perpetuate power by the central government and to build an aura of the supernatural around their supreme leaders Kim — both father and son.[30] Although the regime does not emphasize the connection, the current system of dynastic succession with a paramount father figure also harkens back to Confucianism and the powerful dynastic tradition that united the Korean peninsula for hundreds of years.

The economic practice of *juche* has minimized international trade relations, discouraged foreign direct investment, and fostered what it considers to be core industries — mostly heavy manufacturing. While promoting such heavy industry, for most of the post-Korean War period, Pyongyang has emphasized the parallel development of military strength.

Current head of state, Kim Jong-il (often referred to as "Dear Leader"), has given highest priority to the military. This places the army ahead of the working class for the first time in the history of North Korea's so-called revolutionary movement.[31] Under Kim Il-sung (Kim Jong-il's father), the *juche* ideology placed equal emphasis on political independence, self-defense, and economic self-support capabilities. Kim Jong-il, however, insists that North Korea can be a "country strong in ideology and economy" only when its military is strong.[32] The country, therefore, has been developing its industries within the context of a military-industrial complex with strong links between heavy industry and munitions production. Some of North Korea's munitions industries (manufacturing dual use products) are virtually indistinguishable from those supplying civilians.[33]

In 1998 at the 10th Supreme People's Assembly, the military's National Defense Commission arguably eclipsed the Politburo as the supreme national

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[29] Analysis team of the Daily NK. Lee Myung-Bak's Administration: A Breakthrough in North Korea's Opening, *The Daily NK* (Internet edition), December 12, 2007.

[30] See, for example: Natural Wonders Prove Kim Jong-il's Divinity: North Korean Media, Agence France Presse. May 3, 2003.

[31] British Broadcasting Corporation. N. Korea: Paper Supports Leader Kim Jong-il's Military-first Ideology, April 26, 2003. Reported by BBC from KNCA News Agency (Pyongyang).

[32] Toyama, Shigeki. Expert on Kim Chong-il's "Military-First Politics," South-North Issues, Tokyo Gunji Kenkyu (in Japanese, translated by FBIS), August 1, 2002. P. 108-117.

[33] Nam, Woon-Suk. Guidelines of Economic Policies. KOTRA, January 9, 2001.

decision making body in North Korea. In the years since, the term "military-first politics" has been used to signify the privileged status the Korean People's Army holds and to stress the ascendant position of the military relative to the power of the Korean Workers' Party, the traditional center of the DPRK's decision making.[34] Of course, the ultimate decision maker in Pyongyang is the Dear Leader, Kim Jong-il.

In 2006, Pyongyang's defense budget was an estimated $2.3 billion to maintain its 1.1 million member military.[35] South Korea estimated the North's military expenditures at $5 billion in 2003. In 2005, North Korea stated that the defense budget was 15.9% of its total annual budget,[36] but others had put the figure at 27.2% in 2003. Even a defense budget of $2.3 billion, however, implies an expenditure of $2,090 per member of the military, a woefully small amount. This implies that the tug of war between "guns and butter" within the North Korean regime must be quite intense given the scarcity of resources throughout the country even though the military does operate businesses that bring in additional revenues.

The heavy weight of the military in Pyongyang's decision making may help explain what to outsiders seem to be inexplicable actions by the North Korean government. For example, almost immediately after negotiators had issued the September 19, 2005, Six-party Statement in which North Korea ostensibly committed itself to abandoning all nuclear weapons and existing nuclear programs, Pyongyang began backtracking and within two months announced a boycott of future Six-Party Talks.[37] It also may help explain North Korea's carrying out its first nuclear test on October 9, 2006, despite being warned not to do so by the United States, China, and other nations. Recent progress in the six-party talks under which North Korea shut down its Yongbyon nuclear reactor as required in phase I of the February 13, 2007 agreement arguably represents a defeat for the military, but the slow progress in phase II to date could indicate strong resistance by military interests to cutting more deeply into North Korea's nuclear program.[38]

When *juche* is combined with central planning, a command economy, and government ownership of the means of production, economic decisions that in a market economy would be made by private business and farmers have to go through a few elite in Pyongyang. These decisionmakers may or may not understand advances in agronomy or manufacturing and tend to be motivated by non-economic

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[34] Gause, Ken E. *North Korean Civil-military Trends: Military-first Politics to a Point*. Army War College, September 2006. P.

[35] The International Institute for Strategic Studies. *The Military Balance, 2006*. London, Routledge, 2006. P. 276. Also, *The Military Balance, 2007*, p. 357. Note: in the 2008, edition of the *Military Balance*, the DPRK's defense budget is listed as "definitive data not available."

[36] "DPRK Allocates 15.9 Percent of State Spending for Military." *People's Daily Online*, April 12, 2005.

[37] Asia: The deal that wasn't; North Korea. *The Economist*. London: September 24, 2005. p. 81.

[38] For a description of decisionmaking in the DPRK, see Former DPRK Diplomat's Book on DPRK National Strategy, Inner Circle Politics (2). Open Source Center document KPP20070918037001. August 20, 2007. (Translated by Open Source Center from Korean)

factors, such as maintaining political power or avoiding blame for initiatives gone awry. Farming methods based partly on crop rotation or new varieties of rice, for example, may be viewed as too risky.[39] Foreign investment also is hindered partly because the regime abhors being "exploited" by capitalists who seek to make profits on their business ventures in North Korea and partly because of their deep-seated mistrust of Westerners, Japanese, and South Koreans.

Industrial Sectors

North Korea's industrial sectors are shifting rapidly. At the end of World War II, the DPRK represented the industrialized part of the Korean peninsula. Under Japanese colonialism, heavy industry, water power, and manufacturing were concentrated in the North, while agriculture flourished in the less mountainous South. Even in 1990, 49% of the North Korean economy was in mining, manufacturing, and construction, while 23% was in services (including government and utilities) and 27% in agriculture. In recent years, however, the DPRK's non-military industries have almost collapsed. By 1997, mining, manufacturing, and construction had dropped from 49% to 32% of the economy but in 2003 had risen somewhat to 36%. In 2003, services had risen to 37% of the economy, while agriculture has remained fairly constant at 27%. In 2007, mining, manufacturing, and construction were making a slow recovery to 40% of the economy. Services had gained slightly to 39%, and agriculture had declined to 21% of GDP. (See **Figure 2**.) Some of the most advanced industries in North Korea are associated with its military, and in 2006, $73.7 million worth of goods was produced in the Kaesong Industrial Complex by South Korean firms using North Korean labor.[40]

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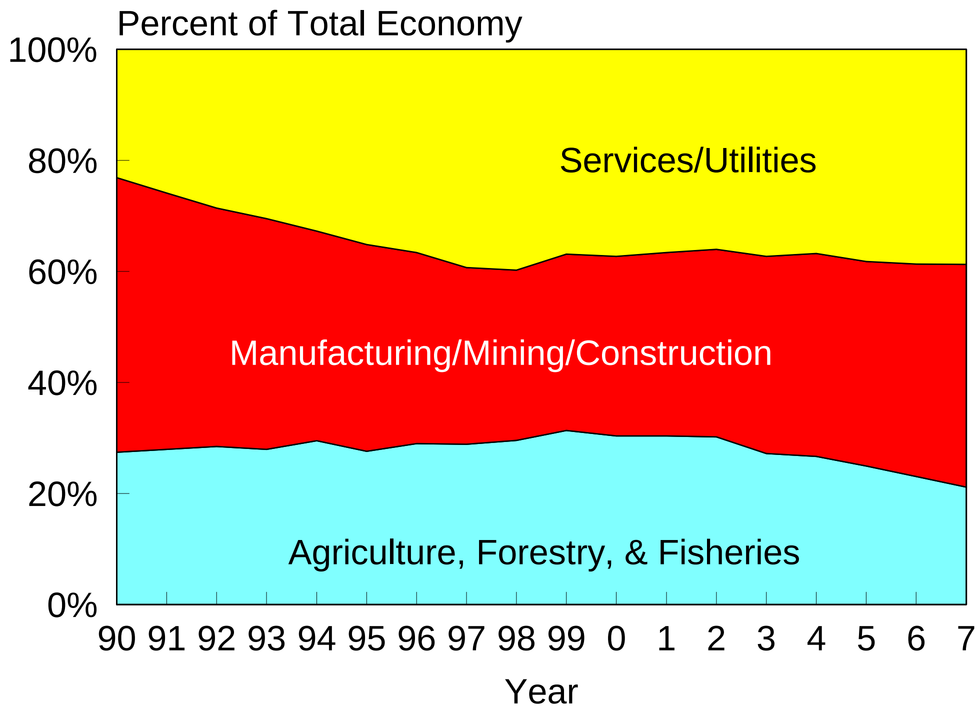
[39] Current experiments in agriculture are directed from Pyongyang with seven major tasks that include replacing chemical fertilizers with organic and microbial ones. See Yonhap News. N. Korea Eyes China as a Model for Development. May 11, 2004.

[40] See CRS Report RL34093, *The Kaesong North-South Korean Industrial Complex*, by Dick K. Nanto and Mark E. Manyin.

Figure 2. North Korea's Industrial Structure



Source: The Bank of Korea.

The drop in the share of manufacturing in GDP has come about largely because of the rapid decline in production from factories, not because of large absolute increases in services or agricultural production. One report indicated that in 2003 factories were running at about 30% of their capacity. The economy lacks food for workers, raw materials, energy, and foreign currency to buy new equipment and imported inputs into the manufacturing process.[41] Much industrial capital stock is nearly beyond repair as a result of years of underinvestment and shortages of spare parts. Recently, the government has emphasized earning hard currency, developing information technology, addressing power shortages, and attracting foreign aid, but it appears unwilling to do so in any way that jeopardizes its control.

North Korea's mining sector is recovering somewhat. In 2007, 57% of China's imports from North Korea were in mineral fuels ($170 million, mostly coal) and ores ($164 million, mostly iron, zinc, precious metal, lead, and molybdenum).[42] North Korea is rich in minerals and ores.[43] The regime looks askance, however, at exporting ores or commodities that were typical of "economic imperialism" during

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[41] Former North Korean Professor Interviewed on Pyongyang's Economic Reform. *Choson Ilbo*, April 14, 2003. Translated and reported by BBC Worldwide Monitoring, April 18, 2003.

[42] Global Trade Atlas using Chinese data.

[43] Shanghai Northeast Asia Investment & Consultancy Company. *A Study Report on the DPRK Mineral Resources*. Shanghai Northeast Asian Forum website, in Chinese, December 7, 2007. Reported by Open Source Center, document #KPP20080123032002.

the colonial era when the foreign companies "exploited" the resources of less developed economies.

The DPRK leadership, in their joint editorial at the beginning of 2008, however, emphasized the need for rebuilding the national economy, particularly mining and the metal, chemical, and light industries. They noted the construction of a large-scale hydroelectric power plant completed in 2007 and set out the goal of constructing an economically powerful state by 2012.[44]

The agricultural sector also is in dire straits. The economy depends heavily on collective farms that have been devastated by drought or floods, lack of fertilizers and other inputs, antiquated farming methods, and a lack of incentives for private production. A report in 2003 from North Korea indicated that the situation along the border with China had deteriorated to the point that rates of starvation, disease, and even suicides were reaching a crisis point.[45] In recent years, there has been a new emphasis on fishing — using both traditional methods and new aquaculture technology. According to the U.N. Food and Agriculture Association, in 2007, North Korea's harvesting of winter crops and potatoes (accounting for about 10% of total production) had risen by 18% to 523,000 tons due primarily to increased potato production.[46] However, severe flooding had damaged grain crops in the southern "cereal bowl" provinces. This resulted a 7% decline to some 3.8 million tons in overall 2007 food crop production.[47]

Economic Reforms and Free Trade Zones

As with other isolationist economies in the contemporary world of globalization and interlinked societies, North Korea has been plagued with the negative effects of its attempts at self sufficiency: technological obsolescence, uncompetitive exports, economic privation, and lack of foreign exchange. These difficulties, together with advice from China and Russia, have compelled the Pyongyang regime to introduce some economic reforms. To a large extent, they are adopting the sequence of Chinese reforms with economic reforms preceding political reforms while eschewing the Russian model of political reform preceding and concurrent with economic reforms.[48] The DPRK also has been examining the Vietnamese model of

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[44] Pak, Yo'n. Basic Spirit That Runs Consistently in This Year's Joint Editorial, *Rodong Sinmun*, in Korean, January 4, 2008. Translated by Open Source Center, document #KPP20080104053004.

[45] Gifford, Rob. North Korea (audio report), NPR Morning Edition, April 30, 2003.

[46] UN Food and Agriculture Organization. Democratic People's Republic of Korea text. October 1, 2007. Available under country profiles on UN FAO website. [http://www.fao.org].

[47] N. Korea more and more open to U.N. aid: rapporteur. *Yonhap*, (in English), January 18, 2008.

[48] For a history of DPRK reforms in light of interaction with China, see Mika Marumoto. North Korea and the China Model: The Switch from Hostility to Acquiescence . Korea Economic Institute. Academic Paper Series, Vol. 2, No. 5, May 2007.

development and *do moi* (reform). Kim Jong-il reportedly prefers the Vietnamese style of gradual economic reform rather than the abrupt Chinese style.[49]

The reforms began in July 2002 when Pyongyang announced a series of measures that some surmise may mark the beginning of the end of the Stalinist controls over the economy and the onset of more use of the market mechanism to make economic decisions, particularly production and consumer purchases. Although the government has dubbed the reforms an "economic adjustment policy,"[50] the actions appear to be a desperate attempt to revive the moribund economy. The reforms also dovetail with North Korea's "military first" policy. As Kim Jong-il has given first priority to the military, the rest of the population has suffered.[51] This, in turn, has raised pressures on Pyongyang to reform its economic system.

The adjustments (reforms) featured an end to the rationing system for daily commodities (except for food), a huge increase in prices of essentials and in wages, a major devaluation of the currency (official exchange rate), abolishment of the foreign exchange coupon system, increased autonomy of enterprises, authorization of the establishment of markets and other trading centers, and a limited opening of the economy to foreign investment. Prices still remain under centralized control but at levels closer to those existing in peasant (free) markets. North Korea has not abandoned the socialist planned economy, but it has been compelled to "adjust" certain aspects of it.

Under the reforms, overall prices were increased by 10 to 20 times. Government prices for many essential items, however, rose by much more. The price for rice rose by 550 times, for corn 471 times, for diesel oil 38 times, and for electricity 60 times. Wages also were raised but not enough to keep pace with skyrocketing consumer prices. Wages rose by 18 times for laborers and 20 times for managers.[52] Even though not all workers received the promised wage increases, the price and wage reforms caused households to face rampant consumer inflation, and many people ended up worse off financially than before the reforms.

In North Korean factories, reforms include greater control over prices, procurement, wages, and some incentives to increase profits in order to distribute them based on individual performance. The regime also is looking to implement reforms in agriculture similar to those implemented in China (along the lines of the rural household contract system). In the mid-1990s, North Korea's agricultural work squads had already been reduced in size. Now they are moving toward family

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[49] The DPRK Learns Vietnam, *Kookmin Ilbo*, Seoul, October 25, 2007. CanKor Report #296. DPRK-Vietnamese Relations, November 1, 2007. Jung Sung-ki.. Kim Jong-il Interested in Vietnamese-style Reform Policy, *Korea Times.* October 28, 2007.

[50] Hong, Ihk-pyo. A Shift Toward Capitalism? Recent Economic Reforms in North Korea. *East Asia Review*, vol. 14, Winter 2002. Pp. 93-106.

[51] In January 2007, the communist party's central committee reportedly asked families to "voluntarily" offer food to the army, since the food shortage in the people's army was severe. Yang, Jung A. Citizens Exploited as the Nation Cannot Produce its Own Income. *The Daily NK* (Internet edition), January 24, 2007.

[52] Hong, Ihk-pyo, A Shift Toward Capitalism?, *East Asia Review*, Winter 2002. Pp. 96.

oriented operations with farmers allowed to retain more of any production exceeding official targets.

Although small farmers' markets have long existed in North Korea, Pyongyang did not legalize such farmers' markets until June 2003. This followed the formal recognition of commercial transactions between individuals and the 1998 revision to the constitution that allowed individuals to keep profits earned through legitimate economic activities.[53] Now free markets and shopping centers that use currency, not ration coupons, are spreading. The Pyongyang Central Market, for example, became so crowded that a new, three-story supermarket had to be built. Pyongyang's Tongil market with its lines of covered stalls stocked with items such as fruit, watches, foreign liquor, clothes, Chinese-made television sets, and beer from Singapore also is bustling with sellers and consumers reminiscent of those in other Asian countries.[54] Visitors to Pyongyang in late 2006 indicated that the market was thriving with all types of products and shoppers driving European cars.[55]

The North Korean population is gradually becoming re-accustomed to operating in open markets. This has raised fears by the DPRK regime of encroachment by capitalism into their socialist economic system. On August 26, 2007, Kim Jong-il announced that "markets have become anti-socialist, Western-style markets." This has led to a steady stream of government edicts restricting market activity across the country. At first, authorities prohibited women under the age of 40 from selling goods in Pyongyang markets. Then on December 1 the authorities banned women under the age of 49 from running businesses in Pyongyang. (Since males are officially required to be at their assigned workplaces, women generally run the businesses.) Certain products, such as videos of South Korean dramas, movies, and other so-called non-socialist elements are also banned from central markets.[56]

Enforcement of the new regulations at first was spotty, but in late 2007, it appears to have become more strict. According to news reports, policing is also being conducted by central government security agencies, organizations that normally deal with issues such as intelligence gathering and sedition.[57] The extent of the Kim regime's attempts to control the development of a market economy can be illustrated by the increased difficulty of acquiring travel permits for persons suspected of being wholesale merchants intending to carry goods from one place to another. This crackdown on travel also is affecting normal tourist and family trips.

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[53] Jeong, Chang-hyun. Capitalist Experiments Seen Expanding into DPRK. *Joong Ang Ilbo*, October 19, 2003. Translated in CanKor #160 by Cananda-DPR Korea e-clipping Service, April 13, 2004.

[54] Lintner, Bertil. North Korea, Shop Till You Drop, *Far Eastern Economic Review*, May 13, 2004. P. 14-19.

[55] Pritchard, Charles L. Siegfried S. Hecker, and Robert Carlin. News Conference: Update from Pyongyang, sponsored by the Korea Economic Institute, held at the National Press Club, Washington, DC, November 15, 2006.

[56] Institute for Far Eastern Studies. *State of the Market in the DPRK*, North Korea Brief No. 07-12-5-1. Posted December 11, 2007.

[57] Han Young Jin. Even the National Security Agency Participates in the Control of the Jangmadang. The Daily NK (electronic version). December 26, 2007.

Corruption, however, allows some businesses to continue, as certain officials reportedly are receptive to bribes. Secret peddling on streets and other banned activity also continues out of sight of the authorities (particularly by young and nimble traders).[58]

Foreign Investment

North Korean economic reforms also include opening certain areas to foreign investment. Under the Joint-Operation Act of 1984 to 1994, there were 148 cases of foreign investment worth about $200 million into North Korea. Of these 148 cases, 131 were from pro-North Korean residents of Japan. In 1991, Pyongyang opened the Rajin-Sonbong free trade zone and established the Foreigner Investment Act. To 1997, some 80 investments totaled $1.4 million. Other areas receiving foreign investment include Nampo, Pyongyang, Kosung-gun, Shimpo, Wonsan, and Mt. Kumkang. Foreign companies in North Korea include 50 South Korean companies (e.g., Hyundai, daewoo, Taechang, LG, Haeju, and G-Hanshin), DHL, ING Bearing Bank; Japan's Hohwa, Saga, and New Future Ltd. companies; Taiwan's JIAGE Ltd., and the China Shimyang National Machinery Facility Sales Agency Corporation.[59] The U.N. Development Programme is promoting the Tumen River Valley Development Project which aims to develop business based on transit transportation, tourism, and commissioned processing trade.[60] Mt. Kumkang has been developed with the cooperation of South Korea's Hyundai corporation into a tourist destination for South Koreans and a venue for reunions of families separated by the DMZ.

According to data compiled by the United Nations Conference on Trade and Development (UNCTAD) since 1987, the DPRK had a cumulative $1.56 billion in foreign direct investment (FDI) as of the end of 2006. Annual FDI flows have been sporadic, even negative in some years, but since 2003, they have been rising. (See **Figure 3**.) In 2007, both South Korea and China increased their investments in North Korea.

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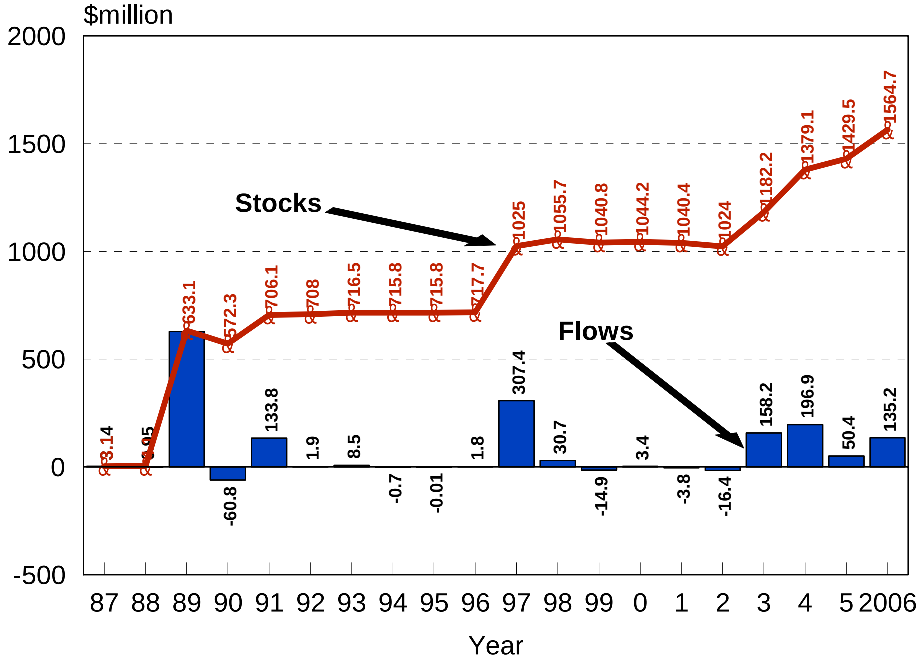
[58] Good Friends: Centre for Peace, Human Rights and Refugees, *North Korea Today,* No. 103, December 2007.

[59] KOTRA, North Korea, Status of Induced Foreign Capital.

[60] K. Park. A Report on Visit to Rajin-Seonbong Region, January 4, 2001. KOTRA,

Figure 3. Foreign Direct Investment Flows and Stocks in the DPRK, 1987-2006



Source: United Nations Conference on Trade and Development. Foreign Direct Investment database.

The industrial sector is receiving some help from Chinese investments and from South Korean firms operating in the Kaesong Industrial Complex. It also is able to attract a limited amount of foreign investment from other nations. For example, in January 2008, Orascom Telecom, the fourth-largest Arab phone operator based in Cairo, Egypt,[61] announced that its subsidiary in North Korea (CHEO Technology — 25% owned by the state-owned Korea Post and Telecommunications) had received a license to be the first provider of mobile telephone services throughout the country. The company is to invest up to $400 million in network infrastructure over the first thee years and to provide service to Pyongyang and other major cities within one year.[62]

North Korea's mining sector is recovering somewhat. In 2007, 57% of China's imports from North Korea were in mineral fuels ($170 million, mostly coal) and ores ($164 million, mostly iron, zinc, precious metal, lead, and molybdenum).[63] North Korea is rich in minerals and ores.[64] The regime looks askance, however, at

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[61] Orascom also reportedly is investing $115 million in a North Korean cement manufacturer for a 50% stake in the firm.

[62] Arab Firm Earns First Mobile License In DPRK. *Yonhap*, January 30, 2008.

[63] Global Trade Atlas using Chinese data.

[64] Shanghai Northeast Asia Investment & Consultancy Company. *A Study Report on the DPRK Mineral Resources*. Shanghai Northeast Asian Forum website, in Chinese, December (continued...)

exporting ores or commodities that were typical of "economic imperialism" during the colonial era when the foreign companies "exploited" the resources of less developed economies.

Since 2000, the DPRK has attempted to emulate China's highly successful free trade zones (FTZ) by establishing the Sinuiju Special Administrative Region (SAR) on the northwestern border with China and Kaesong (Gaesong) Industrial Complex along the border with South Korea. Since being established in 2002, the development of the Sinuiju SAR has been stymied partly because of the arrest by Beijing of Chinese businessman Yang Bin, a Chinese-Dutch entrepreneur who was named as its governor, on charges of illegal land use, bribery and fraud. After Kim Jong-il's visit to China in 2006, Sinuiju appears to be receiving new attention. Foreign currency management groups reportedly are moving in, and ordinary citizens are being replaced by residents of Pyongyang and other areas.[65]

Kaesong Industrial Complex[66]

Currently, the most significant effort at creating free-trade zones is the Kaesong Industrial Complex (KIC). This joint effort between the North and South is developing rapidly, despite tensions over North Korea's testing of ballistic missiles and a nuclear weapon. The KIC is managed by South Korea's Hyundai Asan and Korea Land Corporation. Located just over the border 43 miles north of Seoul on the route to Pyongyang, this 810-acre complex aims to attract South Korean companies, particularly small and medium sized enterprises, seeking lower labor and other costs for their manufactured products and who may not be able to establish subsidiaries in China or other countries. By September 30, 2007, 52 companies had begun operations in Kaesong. They were employing 15,158 North Korean personnel (another 2,025 North Koreans were working in construction in the complex and 599 in administrative offices).[67] To be completed in three stages, the first stage (2002-2007) had 3.3 million square meters of a total of 66 million square meters being constructed or under construction in 2006. Hyundai Asan and the Korea Land Corporation plan to eventually attract 300 businesses in the first stage, 700 in the second, and 1,000 businesses in the third stage with an estimated total of 300,000 workers. Of the $374 million initial cost for the first stage, $223 million was to be provided by the South Korean government. In December 2006, the Korea Electric Power Corporation connected North and South Korea by a 100,000 kilowatt power-transmission line for use by the companies in the KIC.

The initial 15 companies operating in Kaesong and their products included Living Art (kitchenware), Shinwon (apparel), SJ Tech (semiconductor component

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[64] (...continued)
7, 2007. Reported by Open Source Center, document #KPP20080123032002.

[65] Institute For Far Eastern Studies. Interest Revived in the Sinuiju Special Administrative Region. Reported by Nautilus Institute, Policy Forum Online 06-25A, March 30, 2006.

[66] For details, see CRS Report RL34093, *The Kaesong North-South Korean Industrial Complex*, by Dick K. Nanto and Mark E. Manyin.

[67] Republic of Korea. Ministry of Unification. Key Statistics for Gaeseong Industrial Complex. September 30, 2007.

containers), Samduk Trading (footwear), Hosan Ace (fan coils), Magic Micro (lamp assemblies for LCD monitors), Daewha Fuel Pump (automobile parts), Taesung Industrial (cosmetics containers), Bucheon Industrial (wire harness), Munchang Co. (apparel), Romanson (watches, jewelry), JY Solutec (automobile components and molds), TS Precision Machinery (semiconductor mold components), JCCOM (communication components), and Yongin Electronics (transformers, coils).[68]

In 2006, the KIC produced some $7.5 million worth of goods each month.[69] In September 2007, monthly production had reached $17.1 million. Over the January 2005 to September 2007 period, production in Kaesong totaled $213.8 million with $92.3 million in textiles, $26.6 million in chemical products, $54.0 million in metals and machinery, and $41.0 million in electric and electronic products.[70]

Kaesong developed partly from South Korea's sunshine policy of economic engagement with the North. The KIC serves both geopolitical and economic purposes. Geopolitically, it provides a channel for rapproachment between North and South Korea, a bridge for communication, a method of defusing tensions, and a way to expose North Koreans to outside ideas and ways of doing business. Economically, the KIC provides small- and medium-sized South Korean firms with a low-cost supply of labor for manufacturing products, provides jobs for North Korean workers, and provides needed hard currency for Pyongyang. Even after the North Korean nuclear test in 2006, KIC operations continued.

A controversial issue has arisen with respect to the KIC and the proposed South Korea-U.S. Free-trade Agreement. South Korea had requested that products exported from the complex be considered to have originated in South Korea in order to qualify for duty free status under the proposed FTA. Such a provision had been included in other South Korean FTAs.

The language of the proposed Korea-United States FTA (signed but not yet approved by Congress) does not provide for duty-free entry into the United States for products made in Kaesong. Annex 22-B to the proposed FTA, however, provides for a Committee on Outward Processing Zones (OPZ) to be formed and in the future to designate zones, such as the KIC, to receive preferential treatment under the FTA. Such a designation apparently would require legislative approval by both countries.

Other issues raised by the KIC have been the conditions for North Korean workers, whether they are being exploited,[71] as well as the hard currency funds the industrial complex provides for the ruling regime in Pyongyang. South Korean officials, as well as other analysts, point out that average wages and working

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[68] Republic of Korea. Ministry of Unification. Gaeseong Industrial Complex Project — Status and Tasks, June 2005.

[69] South Korea to Continue "Utmost Efforts" for Inter-Korean complex — Minister. Yonhap News Agency. Reported by BBC Monitoring Asia Pacific. London, December 8, 2006.

[70] Republic of Korea. Ministry of Unification. Key Statistics for Gaeseong Industrial Complex. September 30, 2007.

[71] Rights Body Criticizes South Korea Over Refugee Protection, Inter-Korean Complex. Yonhap News Agency, Seoul. Reported by BBC Monitoring Asia Pacific. London, January 12, 2007.

conditions at Kaesong are far better than those in the rest of North Korea. The monthly minimum wage is $50 ($57.50 including the cost of social insurance). General workers receive $50, team leaders receive $52-$55, and heads of companies receive $75 per month. After the government, takes its share of the wages, the workers receive about $37 per month. Workers also receive overtime pay.[72]

The North Korean government derives hard currency from several sources in the KIC project, including leasing fees and its taxes and fees deducted from the wages of North Korean workers. The wages are first paid in hard currency to a North Korean government agency that takes a certain percentage before paying the North Korean workers in won. If the government collects about $20 per month (in social insurance taxes plus its cut of wages) for each of the 10,000 workers now at Kaesong, its monthly take from wages would amount to approximately $200,000 per month or $2,440,000 over a year. One estimate is that Pyongyang has earned a total of about $20 million from the Kaesong Industrial Complex.[73]

Investment From China

China has a direct interest in economic reform and recovery in the DPRK. Chinese business interests with support from Beijing are beginning to invest widely in the North Korean economy. Unlike, South Korean investors, Chinese are allowed to invest in enterprises fully integrated into the DPRK economy. They also have provided machinery and equipment to existing North Korean factories.

Chinese investment in mineral extraction in the DPRK seems to represent an easing the DPRK constitutional ban against "cultural infiltration (Article 41). This has been interpreted to include international economic integration and globalization.[74] However, Pyongyang seems to be treating investment from China as being "not contaminated" relative to those from South Korea or other nations. South Korean investments are carefully walled off from the average North Korean citizen, whereas China has been able to invest in production facilities in various locations.

According to Chinese sources, from January to October 2006, the Chinese side approved 19 new investments in the DPRK, with negotiated investment of $66.67 million. Cumulative investment up to the end of October 2006 included Chinese government approval of 49 investments in the DPRK with negotiated investment of $135 million.[75] These figures seem understated. Since 2006, Chinese investments

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[72] South Korea Considers Expanding Joint Industrial Complex in North. Yonhap News Agency, Seoul. Reported by BBC Monitoring Asia Pacific. London, July 26, 2006. Ministry of Unification (South Korea). The Gaesong Industrial Complex. Status of North Korean Workers. November 14, 2006. Online at [http://www.unikorea.go.kr/english/EUP/EUP0201R.jsp].

[73] CRS Report RL33435, *The Proposed South Korea-U.S. Free Trade Agreement (KORUS FTA)*, by William H. Cooper and Mark E. Manyin.

[74] See Eberstadt, Nicholas. *The North Korean Economy, Between Crisis and Catastrophe* (New Brunswick, NJ, Transaction Publishers, 2007). p. 227.

[75] Embassy of the People's Republic of China in the Democratic People's Republic of Korea. A brief account of the economic and trade relations between China and the DPRK. Online (continued...)

have increased significantly. The projects of the investment covered such fields as food products, medicine, light industry, electronics, chemical industry and minerals.

Major Chinese investments involving mining and minerals in the DPRK include the following:[76]

- China Tonghua Iron and Steel Group has invested 7 billion yuan (approximately $875 million) in developing the DPRK's Musan Iron Mine. Two billion yuan (approximately $250 million) is to be used for the preliminary construction of communication facilities and cables from Tonghua, China, to the DPRK's Musan area; 5 billion yuan (approximately $625 million) is to be used mainly on technology and equipment in developing the mine as well as in Musan's overall planning.) This mine is the largest open-cut iron mine in Asia with verified iron-rich ore reserves reaching seven billion tons.
- On October 20, 2007, China's Tangshan Iron and Steel Company (China's third largest steel company) and the DPRK's Department of Foreign Economic Cooperation and Taep'ung International Investment Group signed a letter of cooperation intent. The two sides are to cooperate on the DPRK Kimch'aek Metallurgy Park Project, and the DPRK So'ngjin Iron, Steel, Coal, and Electricity Project. Tangshan is to build a steel smelting plant in the DPRK with an annual steel output of 1.5 million tons. It is to be jointly funded by the DPRK side and is to involve joint development and utilization of nearby iron ore.
- The China Iron and Steel Group reportedly is ready to develop a molybdenum mine in the DPRK with a goal of producing more than 10,000 tons of molybdenum concentrate per year.
- China and the DPRK have signed a "PRC-DPRK Inter-Governmental Agreement on Joint Development of Offshore Oil" to pursue joint energy projects.
- China's Jilin Province also has cooperated with the Hyesan Youth Copper Mine (containing the largest copper deposit in Asia), Manp'o Zinc and Lead Mine, and the Hoeryo'ng Gold Mine in the DPRK. One project is to transmit electricity from Jilin's Changbai County to the DPRK in exchange for the gold, copper, and other ores. The joint project is to install power transmission facilities with an estimated total investment of 220 million yuan ($27.5 million).
- China's Heshi Industry and Trade Company along with the International Mining Company have set up a joint venture with the DPRK's So'gyo'ng 4 Trade Company called the "DPRK-China International Mining Company." The Chinese side is to provide

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[75] (...continued)
at [http://kp.china-embassy.org/eng/zcgx/jmwl/t306852.htm].

[76] Shanghai Northeast Asia Investment & Consultancy Company. *A Study Report on the DPRK Mineral Resources*. Shanghai Northeast Asian Forum website, in Chinese, December 7, 2007. Reported by Open Source Center, document #KPP20080123032002.

equipment and capital, while the DPRK side is to contribute mineral resources and the existing facilities.

- In October 2005 China Minmetals also signed with the DPRK side an "Agreement on Establishing A Joint Venture in Coal Industry in the DPRK," which called for establishing a joint venture with the DPRK at the Ryongdu'ng Coal Mine.
- On August 23, 2004, China's Zhaoyuan Shandong Guoda Gold Stockholding Company and the DPRK Committee for the Promotion of External Economic Cooperation agreed to establish a joint venture mining company to mine the gold in the DPRK's Mt. Sangnong and to ship all the mined gold concentrate to Zhaoyuan for smelting. The DPRK's Sangnong Gold Mine is estimated to have at least 150 tons of mineable gold. However, due to a shortage of capital and backward technology, it has been in a state of semi-stoppage of production. Guoda is to provide equipment and technology and is to ship the mineral ores by sea to Zhaoyuan for smelting.

International Trade

Despite North Korea's isolation and emphasis on *juche*, it does trade with other countries. According to trade statistics compiled by the International Monetary Fund, the DPRK had at least some trade with 80 of the 182 countries or customs territories that report their trade data to the Fund.[77] For Pyongyang, the foreign economic sector plays an important role in that it allows the country to import food, technology, and other merchandise that it is unable to produce in sufficient quantities at home. Since North Korea does not export enough to pay for its imports, it generates a deficit in reported merchandise trade that must be financed by other means. Pyongyang has to find sources of foreign exchange — other than from its overtly traded exports — to pay for the imports. Experts point out that the DPRK has used its military threat to "extort" aid and other transfers from the United States, Japan, South Korea, and the humanitarian agencies. This, along with various illicit activities, has helped Pyongyang to finance a surfeit of imports.

Detailed data on the country's external economic relations suffer from reliability problems similar to those associated with the domestic economy. The foreign economic data on actual commercial transactions, however, tend to be more accurate since they also are reported by trading partner countries and are compiled by the International Monetary Fund and United Nations. Individual countries, for example, report on their imports from and exports to North Korea. These mirror statistics, however, differ from North Korea's actual annual numbers because of differences in data gathering methods, coverage, timing, and reporting. Countries also may misreport trade with the Republic of Korea as trade with the Democratic People's Republic of Korea. Detailed and reliable data on trade in military equipment and illegal drugs also are notoriously difficult to obtain and to verify.

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[77] International Monetary Fund. *Direction of Trade Statistics*. It should be noted that countries occasionally misreport trade with South Korea as trade with the DPRK.

South Korea also compiles statistics on trade with North Korea that differ from its data reported to the United Nations. South Korea considers trade with the North as inter-Korean trade, not foreign trade. The trade figures that South Korea reports to the IMF for its commercial transactions with the North are considerably lower than the figures that it reports as inter-Korean trade [usually available from the Korea Trade-Investment Promotion Agency (KOTRA)]. The inter-Korean trade data reported by South Korea also include more detail on non-transactional trade (mostly foreign aid) with North Korea. IMF data also differ somewhat from those reported by data vending companies (such as Global Trade Atlas and Global Insight). This report uses a combination of trade totals (mirror statistics) from the IMF, partner country data from the Global Trade Atlas, intra-Korean trade from South Korea's KOTRA, and references some estimates of total trade from Global Insight.

The DPRK's policy of *juche*, its suspicion of foreign countries, and the collapse of its industrial production, has resulted in a minimal level of commercial relations with other nations in the world. This trade has been rising in recent years, although much of this increase can be attributed to investments by South Korea and China in DPRK mining and manufacturing. As shown in **Table 1**, in 2007 North Korea exported an estimated $1,854 million in merchandise (down from $2,048 million in 2006) while importing $3,242 million (up from $2,962 million in 2006) for a merchandise trade deficit of $1,388 million. In recent years, North Korea's exports to and imports from China and South Korea have risen. South Korea and China account for 73% of North Korean exports and 75% of North Korean imports. Economic sanctions imposed by Japan have reduced that bilateral trade to almost nothing.

Table 1. Estimated North Korean Trade by Selected Trading Partner, Selected Years, 1994-2007

($ in millions)

North Korean Exports to:										
	1994	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
World	1,039	1,030	1,307	1,148	1,278	1,251	1,524	1,683	2,048	1,854
China	181	42	37	167	271	395	586	499	468	584
Japan	328	201	257	226	235	174	164	132	78	0
S. Korea	176	122	152	176	272	289	258	340	520	765
Russia	44	7	8	17	11	3	5	7	20	34
India*	13	17	20	3	5	1	4	8	9*	41*
Thailand	9	3	19	24	45	57	91	133	148	34
Germany	57	24	25	23	29	24	22	45	17	16
North Korean Imports from:										
	1994	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
World	1,286	1,353	1,859	3,083	1,970	2,049	2,615	3,093	2,962	3,242
China	467	329	451	573	468	628	799	1,081	1,232	1,393
Japan	171	148	207	1,066	133	92	89	62	44	9
S. Korea	18	212	273	227	370	435	439	715	830	1,032

Russia	70	48	38	62	69	111	205	206	190	126
India	41	35	173	162	182	157	121	55	105	660
Thailand	13	38	189	106	172	204	239	207	216	184
Germany	59	32	53	80	139	71	68	63	63	34
Balance of Trade	-247	-323	-552	-1,935	-692	-799	-1,090	-1,410	-914	-1,388

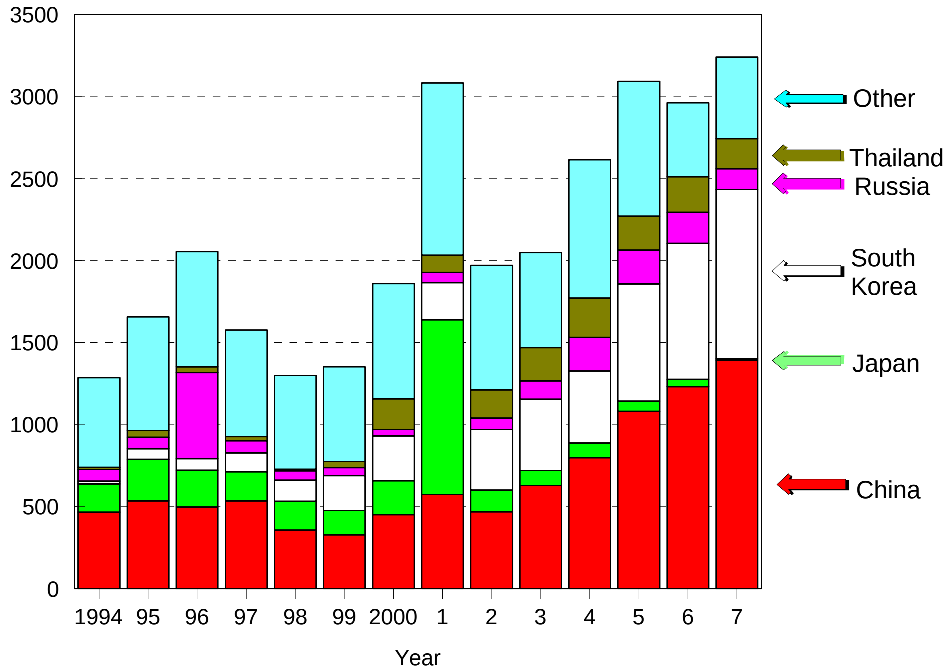
Source: S. Korean data from S. Korea, Unification Ministry. World trade data from U.N. COMTRADE Database, accessed via U.S. Department of Commerce, Trade Policy Information System, August 2008. Country data from Global Trade Atlas and U.N. COMTRADE Database. World trade totals mirror data derived from U.N. reporter country trade with North Korea plus inter-Korean trade reported by South Korea and adjusted Indian data for 2006 and 2007.

*Data for Indian imports from North Korea seem in error for 2006 and 2007. (Items such as electrical machinery and parts, in particular, likely actually were imported from South Korea.) After comparing reported Indian data with that for China, 2006 imports by India from North Korea of $475 million were reduced to $9 million, and 2007 imports of $173 million were reduced to $41 million.

North Korea's major trading partners have been China, South Korea, Japan, Russia, Germany, Thailand and India (as well as Brazil, Singapore, and Hong Kong). As shown in **Figure 4** and **Table 1**, North Korea's major import sources have been China, South Korea, Russia, Japan, and Thailand. Germany and India also are major suppliers. Major imports by North Korea include machinery, minerals, plant products, and chemical products.[78] In particular, imports of energy materials and foods reflect Pyongyang's attempts to remedy these fundamental shortages.

[78] (South) Korea Trade-Investment Promotion Agency.

Figure 4. North Korean Imports of Merchandise by Major Country of Source, 1994-2007

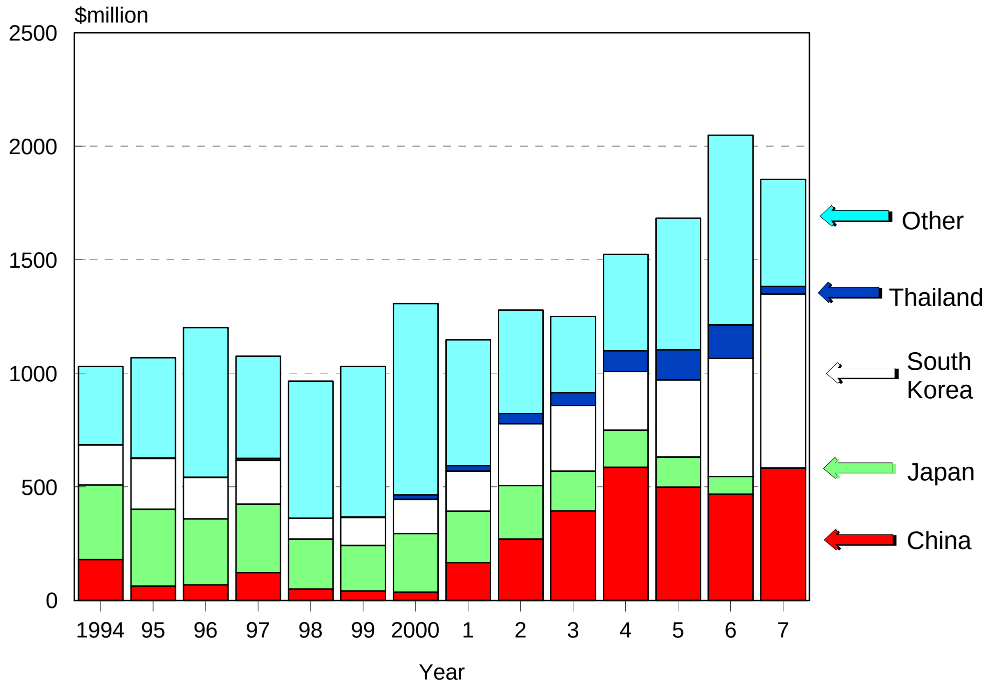


Source: Data from U.N. COMTRADE Database, Global Trade Atlas, and (South) Korea Unification Ministry.

Despite current tensions over Pyongyang's nuclear program, imports appear to be growing and are estimated to have exceeded their peak in 2001 when a large shipment of food aid from Japan artificially increased the import total. Fuel imports from China, food imports from various countries, and supplies of material and components for assembly in the Kaesong Industrial Complex account for most of the increases. In 2007, imports from the United States and Japan were virtually nonexistent. It is apparent that China and South Korea increasingly are becoming the largest sources of imports for the DPRK.

Major export markets for the DPRK have been China, Japan, and Thailand with South Korea developing as a major market following the easing of relations. (See **Figure 5** and **Table 1**.) In Europe, Germany has been North Korea's major trading partner, and in Latin America, Brazil is developing as a market for North Korea's exports. Since 2003, exports to Japan have declined — due to trade sanctions and friction over the DPRK's admitted kidnappings of Japanese citizens. North Korea's major exports include ores, coal, animal products, textiles, machinery, electronic products, and base metals.

Figure 5. North Korean Exports of Merchandise by Major Country of Destination, 1994-2007



Sources: United Nations, COMTRADE Database and Global Trade Atlas using partner trade data. South Korean data from Korea Unification Ministry

A recent remarkable development has been North Korea's increase in exports of primary products (such as fish, shellfish and agro-forest products) as well as mineral products (such as base metallic minerals). Pyongyang reportedly has imported aquaculture technology to increase production of cultivated fish and agricultural equipment to increase output of grains and livestock. It also has imported equipment for its coal and mineral mines. Much of the coal and mineral exports have resulted from partnering with Chinese firms through which the Chinese side provides modern equipment in exchange for a supply of the product being mined or manufactured. The production from the Kaesong Industrial Complex also has become significant. North Korean imports from South Korea and China both exceeded $1 billion in 2006, and North Korean exports to South Korea reached $765 million and to China $582 million.

Meanwhile, traditional exports of textiles and electrical appliances have been declining. This reflects North Korea's unstable power supply, lack of raw materials and components imported from abroad, and the need to ship finished goods to China or another third country for final inspection. This diminishing ability of North Korea to provide a reliable manufacturing platform for the least complicated assembly operations without help from foreign investors does not bode well for the country's future ability to generate the exports necessary to balance its trade accounts.

Other Sources of Foreign Exchange

North Korea's annual merchandise trade deficit of about $1 billion implies that Pyongyang must either be receiving imports without immediate payment required (aid and capital flows) or be generating foreign exchange through some means — either legal or illegal. Legal means include borrowing, foreign investments, foreign aid, remittances from overseas North Korean workers, selling military equipment not reflected in trade data, and by selling services abroad. Illegal methods include the counterfeiting of hard currency, illegal sales of military equipment or technology, sales of illegal drugs, or by shipping illegal cargo between third countries. The country also can dip into its foreign exchange reserves.[79]

Legal Sources of Funds

North Korea is able to borrow on international capital markets. As of the fourth quarter of 2007, the country had loans from foreign located banks that report to the Bank of International Settlements (BIS) of $50 million (down from $116 million at the end of 2006 and $121 million at the end of 2005, $81 million in 2004, and $190 million in 2003). The amount of loans for 2007 is a relatively small amount, only about $2 per capita. Total liabilities to BIS banks (including those located in North Korea) came to $1,532 million for the fourth quarter of 2007 (up considerably from $489 million in first quarter 2007). Most of these liabilities appear to be export credits. North Korea also had deposits of $388 million in BIS banks at the end of 2007.[80]

International bond issues are not a major source of funds for North Korea. In May 2003, the country issued ten-year bonds — the first since 1950 — but since its sovereign securities are not rated by major Western credit rating agencies, the issue has generated little interest on international financial markets and is aimed at domestic investors. Pyongyang claims that a million people had signed up to receive the bonds, but many speculate that the deductions from the salaries of North Korean purchasers in amounts equivalent to four months' wages to buy the bonds is not voluntary.[81] North Korea does not pay interest on the bonds. Rather the government holds a lottery in which the winners receive monetary prizes greater than the foregone interest on the bonds.[82]

Although North Korea is not a major recipient of foreign direct investment (FDI), in 2006, the stock of foreign direct investment in the DPRK was $1,565 million. The inflow that year was $135 million, up from the inflow of $50 million

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[79] For an examination of North Koreas external relations, see Stephan Haggard and Marcus Noland, North Korea's External Economic Relations, Peterson Institute for International Economics Working Paper No. WP07-7, August 2007.

[80] Data are from Joint BIS-IMF-OECD-WB External Debt Hub at [http://devdata.worldbank.org/sdmx/jedh/jedh_home.html].

[81] Gittings, Danny. Kim Can't Kill the Free Market. *The Wall Street Journal (Brussels)*, May 30, 2003. P. A11.

[82] DPRK Holds Annual Lottery for Government Bond Repayments. Institute for Far Eastern Studies, *NK Brief* No. 08-1-3-2, January 3, 2008.

in 2005, but less than the $197 million in 2004, and $158 million in 2003.[83] The FDI comes mainly from South Korea and China. North Korea's free trade zones, particularly the Kaesong Industrial Complex, however, are attracting more foreign direct investment. In addition, South Korea's Hyundai Corporation secretly paid North Korea nearly $500 million, partly in money borrowed from the South Korean government just a week before the two nations held a historic summit in June 2000. This was part of an estimated billion dollars or more Hyundai was to pay for exclusive rights to engage in seven major economic projects there.[84]

Table 2. North Korea: Total Net Receipts by Major Source/Donor, 2000-2006

($millions)

	Total Receipts Net						
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
U.S.	1.6	0.3	131.2	42.9	56.5	6.9	0.4
Germany	-2.4	34.1	35.0	11.8	54.2	6.5	3.2
France	28.4	12.8	-656.4	447.7	1,151.1	6.2	-16.9
Australia	7.9	4.8	5.4	2.1	3.9	5.3	4.5
Norway	4.6	7.9	5.5	9.5	5.6	5.3	3.8
Sweden	3.5	3.4	4.3	4.9	46.2	59.4	-74.8
Switz.	1.0	6.1	2.1	4.0	3.9	4.2	7.0
UK	-7.4	1.1	-15.9	44.8	142.3	0.2	..
EC	25.0	40.3	61.2	30.9	31.4	19.4	12.1
Multilateral	46.4	65.0	40.1	51.7	47.5	41.5	23.3
World Food Program	0.6	0.6	0.1	3.2	7.5	8.4	1.8
Arab Countries	..	.4	1.8	1.3	10.8	5.7	2.1
Total	**76.07**	**188.6**	**-440.2**	**593.4**	**1,529.6**	**148.7**	**59.6**

Source: Organisation for Economic Cooperation and Development. *Source OECD, International Development Statistics,* on-line database. [http://stats.oecd.org]

Note: Data are from OECD members, multilateral agencies, and 12 other reporting nations excluding South Korea, China, and Russia. Multilateral Agencies include the UN, International Fund for Agricultural Development, Arab Agencies, and European Community. EC = European Community. Total Receipts include Official Development Assistance + Other Official Flows + Private Flows. In 2006, the DPRK received $101.8 million from the Netherlands.

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[83] United Nations Conference on Trade and Development. *World Investment Report, 2007*. New York, United Nations, FDISTAT database showing Major FDI Indicators.

[84] Seo, Soo-min. Questions Linger Despite President's Statement. *Korea Times*, February 14, 2003. Dorgan, Michael. Secret Payment to North Korea Disclosed, *Knight Ridder Newspapers*, January 30, 2003.

A major source of funding for imports into the DPRK has been foreign aid or direct government transfers. Both developmental and humanitarian aid and past assistance under KEDO (Korean Peninsula Energy Development Organization, created under the 1994 Agreed Framework, but construction was terminated in 2003) to build two light water nuclear reactors and provide heavy fuel oil have enabled imports into North Korea without financing from Pyongyang.

North Korea also receives funds in the form of official development assistance (ODA) from aid donor nations, multilateral development banks, and other organizations; other official flows; and private flows. The Organisation for Economic Co-operation and Development (OECD) compiles these data from its member nations plus 12 others and from multilateral agencies. The OECD data, however, do not include reporting from South Korea (Seoul considers transactions with the North as intra-country, not as foreign), China, or Russia (not members of the OECD). As shown in **Table 2,** in 2004, net total receipts for North Korea came to $1,529.6 million from donors, primarily because of a $1.151.1 million receipt from France, $142.3 million from the United Kingdom, and $56.5 million from the United States. In 2005, however, the net total dropped to $148.7 million as the dispute over North Korea's nuclear program escalated, and fell further to $59.6 million in 2006 as North Korea made significant repayments of previously received funds.

As shown in **Table 3**, much of the total receipts by North Korea came in the form of official development assistance. In recent years, the country has received between $46 and $286 million in net official development assistance (ODA) from the countries and agencies that report such data to the OECD (does not include Russia, China, and South Korea). In 2004, total net ODA was $120.8 million, in 2005 was $64.7 million, and in 2006 was 45.7 million. The major donors have been the multilateral agencies, European Community, the United States, Sweden, Norway, and Germany.

Table 3. North Korea: Net Official Development Assistance by Major Source/Donor (Excluding Russia, South Korea, and China), 1999-2006
($ in millions)

	Total Net Official Development Assistance						
	2000	2001	2002	2003	2004	2005	2006
U.S.	1.6	0.3	131.2	42.9	56.0	7.9	0.4
Germany	1.5	27.0	33.2	7.2	7.5	5.2	2.9
France	1.7	0.3	0.5	-0.4	-0.5	-0.4	0.6
Australia	7.1	4.6	2.0	2.1	3.3	4.6	2.7
Norway	3.3	2.5	3.6	4.4	5.6	5.3	3.8
Sweden	3.5	3.4	4.3	4.9	5.4	5.5	5.1
Switzerland	2.6	4.5	3.4	4.0	3.9	4.2	6.0
European Community	25.0	40.3	61.2	30.9	31.4	19.4	12.1
Multilateral Agencies (not EC)	1.6	1.8	3.1	4.0	1.1	2.7	1.7
Non DAC*	—	0.4	1.87	1.4	11.1	5.9	2.3
Total	**73.3**	**117.6**	**265.2**	**131.0**	**160.8**	**86.8**	**54.5**

Source: Organisation for Economic Cooperation and Development, Development Statistics database.
*Non DAC=Non-OECD Development Assistance Committee, such as Thailand and Poland.

The United States also has paid North Korea to search for remains of American servicemen missing from the Korean War. In 2003, it paid $2.1 million to conduct four searches.[85]

As indicated in **Table 4**, between 2000 and 2004, South Korean government assistance to North Korea ran at around $500 million per year. South Korean civilian organizations also provided assistance to North Korea ($71 million in 2003).[86] The KEDO item is for energy and funds provided to the Korean Peninsula Energy Development Organization in exchange for North Korea's pledge to dismantle its existing nuclear program. This program has been halted.[87]

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[85] U.S. to Pay N. Korea for MIA Search. Associated Press. July 15, 2003. For details on U.S. assistance to North Korea, see CRS Report RS21834, *U.S. Assistance to North Korea: Fact Sheet*, by Mark E. Manyin.

[86] Republic of Korea, Ministry of Unification. Inter-Korean Relations on the Occasion of the 4th Anniversary of the June 15 Joint Declaration. June 18, 2004. p. 9.

[87] CRS Report RS21834, *U.S. Assistance to North Korea: Fact Sheet*, by Mark E. Manyin.

Table 4. Economic Aid and Other Official Flows From South Korea to North Korea, 2000-2004 and Total 1995 to 2004

($ in millions)

Year/ Type	2000	2001	2002	2003	2004	Total 1995-2004
Total	**706.5**	**453.2**	**584.9**	**650.4**	**543.3**	**3,279.7**
KEDO[a]	308.9	271.1	288.7	333.0	137.1	1,365.2
Food Aid Pledges	93.4	17.3	120.4	122.2	164.6	794.9
Fertilizer Pledges	83.4	49.5	66.6	70.1	89.8	387.9
Road & Rail Links	12.9	69.6	53.5	94.1	92.6	322.7
Payment for 2000 Summit	200.0					
Mt. Kumgang Tours[b]	—	34.8	43.9	5.1	6.8	90.6
Aid to ROK Business	0.4	0.8	2.2	10.7	11.9	26.1
Kaesong Industrial Complex[b]					21.8	21.8
Family Reunions	2.4	1.0	1.6	2.5	2.8	10.7
Other[c]	5.0	9.1	7.9	12.8	15.9	50.7

Source: CRS Report RL31785, *Foreign Assistance to North Korea*, by Mark E. Manyin, Appendix A. See report for data sources and analysis.
a. Korean Peninsula Energy Development Organization
b. Republic of Korea Export-Import Bank's "DPRK Support Fund"
c. Includes Cultural Exchanges and Aid to non-governmental organizations

Another major source of income for certain North Korean families has been in remittances from overseas Koreans, particularly those who live in Japan.[88] Most of the North Koreans in Japan either remained there after World War II or are descendants of those people. Some had been forcibly brought there to work in coal mines or factories during the 50-year Japanese occupation of Korea. Currently, of the approximately 650,000 ethnic Koreans who live in Japan, an estimated 56,000 to 90,000 are from the North Korean area, and many are reported to be actively involved in supporting the Pyongyang regime. Ethnic Koreans in Japan work in a variety of businesses and occupations, but they face discrimination in Japanese society and are known for operating pachinko (pinball) parlors and other enterprises providing entertainment and night life as well as being involved with Japan's *yakuza* or gangsters. Many of these, as well as managers of North Korean-related credit unions, regularly have sent remittances to relatives or associates in North Korea.

[88] For details, see CRS Report RL32137, *North Korean Supporters in Japan: Issues for U.S. Policy*, by Emma Chanlett-Avery. DPRK workers also are countries such as those in the Middle East, China, and Russia.

One unusual method of smuggling money to North Korea has been to hide 10,000 yen bills (worth roughly $90 each) under expensive melons being shipped to Kim Jong-il as gifts.[89]

Given the decade of stagnation of the Japanese economy and rising tensions between Japan and North Korea, these remittances have reportedly been declining. A 2003 Japanese newspaper report placed the amount at between $200 million and $600 million per year, but that figure could be exaggerated.[90] In testimony before parliament, Japan's Finance Minister stated that in Japan's FY2002, $34 million had been sent from Japan to North Korea through financial channels that required reports to the Japanese government.[91] A working estimate would be approximately $100 million per year in such remittances. Anecdotal evidence indicates that considerable amounts of currency from Japan are simply carried by individuals on ships and not reported. More than 1,000 North Korean freight vessels had been traveling between North Korea and Japan each year. Japan, however, has tightened inspections of North Korean ships and curtailed operations of ferry boats traveling between the two countries.[92]

In summary, the DPRK's net total receipts plus remittances, aid and investments from South Korea, and special food and fuel assistance in connection with negotiations over Pyongyang's nuclear program, constitute most of the overt resource inflows that North Korea receives each year over and above its export earnings. These amount to perhaps $700 million on net per year. North Korea must finance the remainder of its trade deficit — about $800 million — by other means. It appears that these other means include exports of military equipment and illicit activity.

Illegal or Questionable Sources of Funds[93]

Data on North Korean sales of military equipment abroad is understandably murky, but the country is thought to have sold hundreds of ballistic missiles to Iran, Iraq, Syria, Pakistan, and other nations in the past decade to earn foreign currency.[94] The interdiction by Spain of an unmarked vessel in December 2002 containing parts for 12 to 15 Scud missiles (valued at about $4 million each) bound for Yemen from

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[89] Melons Used to Smuggle Cash to N Korea. Japan Today News (Online), January 1, 2003.

[90] Remittance Law Reinterpreted Cash Transfers to Pyongyang May Be Suspended as Deterrent. *The Daily Yomiuri* (Tokyo), May 19, 2003. p. 1.

[91] Japanese Finance Minister Says "At Least" 34m US Dollars Sent to North Korea. Financial Times Information, Global News Wire — Asia Africa Intelligence Wire. June 6, 2003.

[92] See, for example, Masaki, Hisane. N Korea's Missiles Met by Japanese Sanctions, *Asia Times Online*, July 6, 2006.

[93] For details, see CRS Report RL33885, *North Korean Crime-for-Profit Activities*, by Liana Sun Wyler and Dick K. Nanto.

[94] Asano, Yoshiharu. N. Korea Missile Exports Earned 580 Mil. Dollars in '01. *Daily Yomiuri*, May 13, 2003.

North Korea is one example of such arms sales.[95] In testimony before the House Committee on International Relations, the Undersecretary of State for Arms Control and International Security pointed out that North Korea possesses Scud and No-Dong missiles and is developing the Taepo-Dong 2. He stated that the country is by far the most aggressive proliferator of missiles and related technologies to countries of concern. These sales are one of the North's major sources of hard currency.[96] According to a U.S. military officer quoted in the Japanese press, North Korea exported $580 million worth of ballistic missiles to the Middle East in 2001.[97] Between 1998 and 2001, North Korea is estimated to have exported some $1 billion in conventional arms to developing nations.[98]

With respect to illegal drug trade, officials from the U.S. military command in Seoul reportedly said that North Korea is earning between $500 million and $1 billion annually from the narcotics trade.[99] North Korea is thought to produce more than 40 tons of opium per year which would make it the world's third-largest opium exporter and sixth-largest heroin exporter. The regime also is accused of trafficking in methamphetamine stimulants. U.S. counter-narcotics officials are reported to have said that since 1976, there have been at least 50 arrests or drug seizures involving North Koreans in more than 20 countries. Japanese authorities say that nearly 50% of illegal drug imports into Japan come from North Korea.[100] According to the U.S. State Department, although such reports have not been conclusively verified by independent sources, defector statements have been consistent over years and occur in the context of regular narcotics seizures linked to North Korea. The State Department's *International Narcotics Control Strategy Report* for 2007 stated its view is "that it is likely, but not certain, that the North Korean government has sponsored criminal activities in the past, including narcotics production and trafficking, but notes that there is no evidence for several years that it continues to traffic in narcotics." During 2006, the Japanese media reported that drug trafficking occurred along the DPRK-PRC border with Japanese criminal figures traveling to the border area to purchase methamphetamine for smuggling back to Japan.

According to the State Department, in March 2006, a new decree warned citizens, state factories and groups in the DPRK to "…not sell, buy, or use drugs

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[95] Solomon, Jay. U.S. Debates North Korean Exports, *Asian Wall Street Journal*, May 5, 2003. p. A1.

[96] Testimony of John R. Bolton, Under Secretary for Arms Control and International Security, U.S. Department of State. U.S. House Committee on International Relations, June 4, 2003.

[97] Asano, Yoshiharu. N. Korea Missile Exports Earned 580 Mil. Dollars in '01. *Daily Yomiuri*, May 13, 2003. Pearson, Brendan. Illicit Boost for N Korea Economy. *Australian Financial Review*, May 14, 2003. p. 12.

[98] CRS Report RL33696, *Conventional Arms Transfers to Developing Nations, 1998-2005*, by Richard F. Grimmett. p. 53. This figure is rounded to the nearest $100 million.

[99] Paddock, Richard C. and Barbara Demick. N. Korea's Growing Drug Trade Seen in Botched Heroin Delivery, *Washington Post*, May 21, 2003. Also see CRS Report RL33885, *North Korean Crime-for-Profit Activities*, by Liana Sun Wyler and Dick K. Nanto.

[100] Kim, Ah-young, Halt North Korea's Drug Habit; a Narcotic State, *International Herald Tribune*, June 18, 2003. p. 8.

illegally" and that "organizations, factories and groups should not illegally produce or export drugs." Punishment is severe, up to death, and the family members and shop mates of offenders face collective responsibility and punishment with the perpetrator.[101]

In a blatant incident in May 2003, the Australian navy and special forces commandeered a North Korean ship (Pong Su) off the country's southern coast that allegedly was moving 110 pounds of almost pure heroin valued at $50 million. The ship apparently picked up the heroin elsewhere in Asia and took a circuitous route to Australia.[102]

Allegations also have been made that North Korea engages in counterfeiting operations, particularly of U.S. $100 notes. It is believed that the country has earned $15 million to $20 million per year in counterfeiting,[103] but it is not clear that North Korea currently engages in counterfeit currency production, although such notes still reportedly circulate.

In the opinion of a North Korean expert at Seoul's Sejong Institute, "North Korea's economy had received a death sentence long ago, but it keeps afloat thanks to international aid and the country's trading in weapons and illicit goods."[104]

Since late 2005, the United States has taken several measures to reduce illicit financial activities by North Korea. On June 28, 2006, President Bush issued Executive Order 13382 (Blocking Property of Weapons of Mass Destruction Proliferators and Their Supporters).[105] On October 21, 2005, pursuant to Executive Order 13382, the U.S. Treasury designated eight North Korean entities as proliferators of weapons of mass destruction and their delivery vehicles. The action prohibited all transactions between the designated entities and any U.S. person and froze any assets the entities may have had under U.S. jurisdiction.[106]

On September 15, 2005, the U.S. Treasury designated Banco Delta Asia SARL as a "primary money laundering concern" under Section 311 of the Patriot Act because it represented an unacceptable risk of money laundering and other financial crimes. Treasury stated that "Banco Delta Asia has been a willing pawn for the North Korean government to engage in corrupt financial activities through Macau

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[101] U.S. Department of State. *International Narcotics Control Strategy Report, 2007*. March 2007.

[102] Struck, Doug. Heroin Trail Leads to North Korea. *Washington Post Foreign Service*, May 12, 2003. p. A01.

[103] For details, see CRS Report RL33324, *North Korean Counterfeiting of U.S. Currency*, by Raphael F. Perl and Dick K. Nanto.

[104] Choe, Sang-Hun. N. Korea Sees Sanctions Amid Tough Times. Associated Press Online, June 12, 2003.

[105] Available at [http://www.whitehouse.gov/news/releases/2005/06/20050629.html].

[106] U.S. Department of the Treasury. Treasury Targets North Korean Entities for Supporting WMD Proliferation. Press Release JS-2984, October 21, 2005.

....”[107] On March 14, 2007, the Treasury finalized its rule against Banco Delta Asia, barring the bank from accessing the U.S. financial system, but allowing the $25 million in North Korean funds held to be released.

U.S.-DPRK Trade Relations

U.S. trade with the DPRK is quite limited. The United States does not maintain any diplomatic, consular, or trade relations with North Korea, and the country does not have normal trade relations (most favored nation) status. This means that North Korean exports are subject to the relatively high tariffs existing before World War II in the United States. For example, women’s blouses of wool or cotton carry a 90% import duty if from North Korea but are duty free if from free-trade agreement countries, such as Canada, Israel, or Mexico, or are subject to 9 to 10% duty if from most other nations. As a communist nation, North Korea also does not qualify for duty-free treatment of certain products that are imported from designated developing countries under the generalized system of preferences program.[108]

The United States, moreover, maintains various economic sanctions on North Korea because the country is on the U.S. State Department list of state supporters of international terrorism, is considered a threat to national security, is a communist state, and it proliferates weapons of mass destruction.[109] In June 2008, however, the Bush Administration announced that it was lifting restrictions under the Trading with the Enemy Act and was starting the process to remove the DPRK from the list of State Sponsors of Terrorism. Other sanctions, including U.N. sanctions imposed following North Korea’s nuclear test, still remain in place. The United States resumed shipments of food and heavy fuel oil to North Korea as humanitarian aid. Travel to and trade with North Korea in other than dual-use goods are allowed if overarching requirements are met, and there are no restrictions on the amount of money Americans may spend in the DPRK. The sanctions related to the proliferation of weapons of mass destruction generally target the offending entities. North Korean assets in the United States frozen prior to June 19, 2000, remain frozen. North Korea is on the most restricted list of countries for U.S. exports (Country Group E list) of items such as computers, software, national security-controlled items, items on the Commerce Control List,[110] and service or repair of such items. Economic sanctions on North Korea, however, are essentially unilateral by the United States. Most other nations (except Japan) allow relatively free trade in non-sensitive goods with the DPRK.

In October 2007, President Bush reportedly approved the lifting of some sanctions imposed on the DPRK under an act governing human trafficking. This easing allowed the United States to provide assistance in educational and cultural

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[107] U.S. Department of the Treasury. Treasury Designates Banco Delta Asia as Primary Money Laundering Concern under USA PATRIOT Act. Press Release JS-2720, September 15, 2005.

[108] See CRS Report 97-389, *Generalized System of Preferences*, by William H. Cooper.

[109] See CRS Report RL31696, *North Korea: Economic Sanctions*, by Dianne E. Rennack.

[110] [http://w3.access.gpo.gov/bis/ear/ear_data.html]

exchanges to the extent that the aid doesn't damage its national interest.[111] In February 2008, the New York Philharmonic Orchestra performed in Pyongyang.[112]

In October 2007, the White House requested $106 million "to provide Heavy Fuel Oil or an equivalent value of other assistance to North Korea on an "action-for-action" basis in support of the Six-Party Talks in return for actions taken by North Korea on denuclearization.[113] The Consolidated Appropriations Act, 2008 (H.R. 2764, PL 110-161, Signed December 26, 2007) provided for up to $53 million for energy-related assistance for North Korea.

The United States uses trade with North Korea as leverage and to send a message of disapproval for various activities by Pyongyang. As the six-party nuclear talks have progressed, however, the United States has expressed its willingness begin discussions to normalize relations with the DPRK, has taken steps to remove it from the terrorism list,[114] and has indicated its willingness to negotiate a peace treaty to formally end the Korean Conflict. The way also could be opened for North Korea's admission to membership in international financial institutions (such as the World Bank, International Monetary Fund, and Asian Development Bank). This would allow the DPRK to receive development assistance that would help finance additional imports from countries such as the United States.

Table 5 shows U.S. trade with North Korea for 2004-2007. In 2004, U.S. exports to the DPRK of $23.8 million were mostly for food provided as humanitarian aid. In 2005, food aid was down to $5.8 million, and in 2006 had ceased. In 2006, the only U.S. exports were books and newspapers worth $3,000. With some progress in the Six-Party Talks, in 2007, U.S. exports of white wheat to North Korea rose to $1.728 million. As for imports, in 2004, the United States imported $1.5 million in organic chemicals plus $77,000 in woven apparel from North Korea. In 2005, imports had dropped to $3,000 worth of tools and cutlery, and were nil in 2006 and 2007.

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[111] Yoon, Won-sup. US Eased Sanctions on North Korea in 2007, *Korea Times*, February 12, 2008.

[112] Daniel J. Wakin. North Koreans Welcome Symphonic Diplomacy. *New York Times*, February 27, 2008. p. 1.

[113] White House. Office of the Press Secretary. Fact Sheet: 2008 War Funding Request, October 22, 2007.
[http://www.whitehouse.gov/news/releases/2007/10/print/20071022-7.html]

[114] The North Korean Counterterrorism and Nonproliferation Act (H.R. 3650, Ros-Lehtinen, Ileana) provides for the continuation of restrictions against the government of North Korea (imposed as a result of the DPRK being deemed a supporter of international terrorism) unless the President certifies to Congress that North Korea has met certain benchmarks respecting: (1) missile or nuclear technology transfers; (2) support of terrorist groups and terrorist activities, (3) counterfeiting of U.S. currency, (4) release of South Korean POWs, Japanese journalists, and Kim Donk-Shik; and (5) Bureau 39's closure.

Table 5. U.S. Trade by Commodity With the Democratic People's Republic of Korea (North Korea) in 2004-2006
($ in thousands)

SITC Category	U.S. Exports				U.S. Imports			
Year	**2004**	**2005**	**2006**	**2007**	**2004**	**05**	**06**	**07**
Cereals and Cereal Preparations	10,28 5	2,277	0	1,728	0	0	0	0
Fixed Vegetable Fats and Oils	4,259	0	0	0	0	0	0	0
Vegetables	3,461	1,806	0	0	0	0	0	0
Preparations of Cereal, Flour, starch or Milk; Bakers Wares	2,459	0	0	0	0	0	0	0
Misc. Grain, Seed, Fruit		1,573	0	0		0	0	0
Dairy Products and Birds' Eggs	1,157	0	0	0	0	0	0	0
Misc. Textile Articles	191	0	0	0	0	0	0	0
Organic Chemicals	0	0	0	0	1,418	0	0	0
Woven Apparel	0	0	0	0	77	0	0	0
Tools, Cutlery	0	0	0	0	0	3	0	0
Books, Newspapers	0	0	3	0		0	0	0
Total	**23,75 0**	**5,757**	**3**	**1,728**	**1,495**	**3**	**0**	**0**

Source: U.S. Department of Commerce accessed through World Trade Atlas.

Table 6 shows U.S. merchandise exports, imports, and trade balances with North Korea since 1990. Imports have been zero or relatively low with a peak of $1,495,000 in 2004. Almost all of these imports from North Korea were organic chemicals and woven apparel. A possible concern is that imports of books, newspapers, and manuscripts have dropped to zero. For a country with great strategic importance to the United States, information on North Korea is not flowing directly into the U.S. market. U.S. exports at $23,750,000 in 2004 rose from $32,000 in 1990 to $25,012,000 in 2002. Another peak occurred in 1995 when U.S. exports totaled $11,607,000. Of this amount, $10,810,000 was in cereals. The small annual deficit in U.S. trade with North Korea arises primarily from food aid that has been provided to the DPRK.

Table 6. U.S. Merchandise Exports, Imports, and Trade Balances with North Korea, 1990-2007
($ in thousands)

Year	U.S. Exports	U.S. Imports	Balance
1990	32	0	32
1991	484	10	474
1992	83	0	83
1993	1,979	0	1,979
1994	180	0	180
1995	11,607	0	11,607
1996	541	0	541
1997	2,409	0	2,409
1998	4,454	0	4,454
1999	11,265	29	11,236
2000	2,737	154	2,583
2001	650	26	624
2002	25,012	15	24,997
2003	7,977	0	7,977
2004	23,750	1,495	22,255
2005	5,757	3	5,754
2006	3	0	3
2007	1,728	0	1,728

Source: U.S. Department of Commerce through World Trade Atlas.

According to the U.S. Department of Commerce, the United States has no direct investment in North Korea.[115] An American company interested in doing business in North Korea, particularly establishing a company, likely would work through an overseas subsidiary. Some American business executives with the U.S. Chamber of Commerce in South Korea, for example, reportedly travel to North Korea for business purposes,[116] and some U.S. enterprises reportedly are working as subcontractors in the development of North Korea's Kaesong industrial complex.[117]

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[115] U.S. Bureau of Economic Analysis. U.S. Direct Investment Abroad Detail for Historical-Cost Position and Related Capital and Income Flows, 2001. *Survey of Current Business*, September 2002, p. 94.

[116] Meeting with President of the American Chamber of Commerce and CRS analysts, April 7, 2003, Washington, DC.

[117] Koo, Kyung-hee. U.S. Enterprises Participate in Developing the Gaeseong Industrial Complex. KOTRA-North Korea Team. January 30, 2004. Reprinted in *KOTRA Bulletin*, February 11, 2004.

North-South Korean Economic Relations

Economic relations have been a major route for opening relations between North and South Korea. Seoul has a major stake in relations with the DPRK and the outcome of the current Six-Party Talks.[118] It seeks a "soft landing" for the current standoff over the North's nuclear program — one that will lead to a lessening of tensions and steady integration of North Korea's economy into the global economic and financial system. As with other countries divided by ideology and a history of hostilities as "pawns" on the chess board of the Cold War, the two halves of the peninsula face numerous issues to be resolved before they can normalize relations — let alone contemplate reunification.

South Korea has much to gain from rapprochement with the North. Its strategy has been to use its economic leverage and family reunions (families separated by the division of the Korean Peninsula) to open channels with the North Korean people while maintaining a credible military deterrent to overt hostile action by Pyongyang. South Korea recognizes that essentially it has won the Cold War on the Korean peninsula, but it recoils at the prospect of funding economic rehabilitation in the DPRK as West Germany did with East Germany. Seoul also recognizes that its economic ties are gradually shifting from reliance on the American market to greater integration with China, Japan, and other countries of Asia. Its labor costs are rising, and many of its companies are remaining competitive only by manufacturing in China and other low-wage markets. For them, the prospect of abundant cheap labor just a short distance to the north is appealing and perhaps an alternative to cheap labor in China.

In 2007, total merchandise trade between the two Koreas increased to $1,797.9 million, up from $1,349.7 million in 2006 and more than triple the $403.0 million just six years earlier. The largest increases have been in South Korean exports which reached $1,032.6 million, up 24% from $830.2 million in 2006. Imports from North Korea also rose to $765.3 million, up 47% from $519.6 million in 2006. Much of the increase in exports has been in the form of food and industrial goods. In 2006, $419.3 million in South Korean exports to the North were actually South Korean aid shipments.

The major items purchased by South Korea from the North include food/aquatic/forestry products, textiles, steel/metal products, and electronics. The major South Korean exports to North Korea include chemicals, textiles, machinery, steel/metal products, and food/forestry products.

Since 1992, particularly under the Sunshine Policy of former South Korean President Kim Dae Jung and under the Policy for Peace and Prosperity of former President Roh Moo-hyun, Seoul has permitted its corporations to pursue business interests in North Korea. In 2003, the government allowed activities by 89 companies including 35 involved in contract processing (assembly, sewing, or other

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[118] The Six-Party Talks are made up of representatives from the United States, Japan, North Korea, South Korea, Russia, and China.

processing done under contract) by North Koreans.[119] The companies included Daewoo (jackets, bags), Samsung Electronics (communications center, switchboard), Samcholi Bicycle, Green Cross (medicine), International Corn Foundation (corn seeds), Hyundai (Mt. Kumkang tourism, development), and Hanshin Co. (glass). The Korea Electronic Power Corporation's work on the construction of a light water nuclear power plant under the U.S.-North Korean 1994 Agreed Framework has been halted.[120] One global strategy of South Korean businesses is to develop processing sites in North Korea to take advantage of low labor costs there; in some cases, labor costs are competitive with those in China. The two countries also have taken some halting steps toward linking their economic systems. In addition to the business relationships, since September 2002, the two countries have been reconnecting the Gyeongui (Seoul-Sinuiju) and Donghae (East Sea) railway lines and adjacent highways.

As discussed in the section above on Economic Reforms and Free Trade Zones, the focus of North-South economic cooperation now is the Kaesong Industrial Complex (KIC). Managed by South Korea's Hyundai Asan and Korea Land Corporation and located just over the border in North Korea, this 810 acre complex already has attracted small and medium sized enterprises from South Korea. The KIC accounts for much of the increased commercial trade between the North and the South. In 2006, the KIC produced some $7.5 million worth of goods each month.[121] It provides small- and medium-sized South Korean firms with a low-cost supply of labor for manufacturing products, provides jobs for North Korean workers, and provides needed hard currency for Pyongyang.

North Korea depends more on South Korea in international trade than South Korea does on the North. North Korea accounts for less than 1% of total South Korean exports, while North Korean exports to South Korea account for more than a third of total North Korean exports. South Korea has access to global markets for many of its world class industries (automobiles, semiconductors, consumer electronics, etc.), while North Korea faces restricted markets for its limited array of exports.

In his inaugural speech on February 25, 2008, President Lee Myung-bak indicated that South Korea attitude toward inter-Korean relations should be pragmatic, not ideological. He reiterated his plan to provide assistance in order to

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[119] Speech by Minister Jeong Se-hyun on the 34th Anniversary of the Ministry of Unification. *Korean Unification Bulletin*, No. 53, March 2003.

[120] In March 1996, KEPCO was designated the prime contractor for the construction of two 1,000MW light water nuclear reactors in North Korea for KEDO (Korean Peninsula Energy Development Organization). It broke ground near Sinpo in August 1997. By the end of 2001, the project was 16% completed with some 1,200 workers employed. For details on the Agreed Framework, see CRS Report RL33590, *North Korea's Nuclear Weapons Development and Diplomacy*, by Larry Niksch. For the approval list, see KOTRA, Companies Approved for South-North Korean Economic Cooperation.

[121] South Korea to Continue "Utmost Efforts" for Inter-Korean complex — Minister. Yonhap News Agency. Reported by BBC Monitoring Asia Pacific. London, December 8, 2006.

raise the per capita income of North Korea to $3,000 within ten years if Pyongyang denuclearizes.[122]

Table 7. South Korean Merchandise Trade with North Korea, 1990-2007

($ in thousands)

Year	South Korean Imports	South Korean Exports	Total Trade	Balance
1990	12,278	1,188	13,466	-11,090
1991	105,719	5,547	111,266	-100,172
1992	162,863	10,563	173,426	-152,3
1993	178,167	8,425	186,592	-169,742
1994	176,298	18,249	194,547	-158,049
1995	222,855	64,436	287,291	-158,419
1996	182,400	69,639	252,039	-112,761
1997	193,069	115,270	308,339	-77,799
1998	92,264	129,679	221,943	37,415
1999	121,604	211,832	333,436	90,228
2000	152,373	272,775	425,148	120,402
2001	176,170	226,787	402,957	50,617
2002	271,575	370,155	641,730	98,580
2003	289,252	434,965	724,217	145,713
2004	258,000	439,000	697,000	181,000
2005	340,300	715,500	1,055,800	375,200
2006	519,563	830,198	1,349,761	310,635
2007	765,346	1,032,550	1,797,896	267,204

Sources: South Korea Ministry of Unification, KOTRA.

China-DPRK Economic Relations

China remains North Korea's chief ally. In addition to sharing its status as one of the last communist regimes in the world, China views the Korean peninsula as vital to its strategic interests. Beijing values North Korea as a buffer between the democratic South Korea and the U.S. forces stationed there, as a rationale to divert U.S. and Japanese resources in the Asia Pacific toward dealing with Pyongyang and less focused on the growing military might of China, and as a destination for Chinese foreign investment and trade. Beijing arguably has more influence in Pyongyang than any other nation.

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[122] Inauguration Speech of President Lee Myung-bak, February 25, 2008. On website of the South Korean Ministry of Foreign Affairs and Trade. [http://www.mofat.go.kr/index.jsp].

Cooperation between the two countries is extensive but often strained. In 1961, China and the DPRK signed a mutual defense pact, but recently a Chinese official reportedly said that they are not "well informed of the internal situation of the North Korean military" and that the DPRK "does not listen to what China has to say."[123] (This presumably referred to Pyongyang's missile and nuclear tests.) Also with respect to North Korean refugees, their first destination is usually northeastern China. According to Human Rights Watch, China labels North Korean border-crossers as illegal economic migrants, rather than refugees or asylum seekers, and usually sends them back to North Korea.[124]

China also is hosting and facilitating the ongoing Six-Party Talks that seek a resolution to the North Korean nuclear problem.

In August 2001, Chinese President Jiang Zemin visited Pyongyang and promised increased humanitarian and economic assistance. In April 2004, Kim Jong-il visited Beijing to discuss food aid and nuclear issues.

According to Jane's Information Group, several issues have arisen to cause friction in the Sino-North Korean relationship. These include

- Chinese exasperation at the DPRK's failure to reform its economy;
- Pyongyang's prevarication over the nuclear and peace treaty issues and the consequent dangerous stimulus this provides to proliferation in the region;
- The nuclear standoff with the United States and Pyongyang's possession of nuclear weapons;
- Growing economic and political rapport between Pyongyang and Taipei;
- The North Korean refugee problem on the China-DPRK border;
- Pyongyang's missile testing, prompting Japan to acquire a Theater Missile Defense system, with Taiwan wishing to be included;
- North Korea's construction of underground missile sites close to the Chinese border; and
- North Korea's cavalier attitude towards business. (China occasionally suspends shipments of humanitarian aid to the DPRK because Pyongyang regularly 'forgets' to return Chinese railroad rolling stock.)[125]

In 2006, Pyongyang's missile and nuclear tests severely strained relations between China and the DPRK. Beijing had warned the DPRK not to conduct either of the tests and "lost face" when Pyongyang went ahead with them anyway. As a result, for the first time China agreed to UN resolutions imposing sanctions on the

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[123] Chu, Wan-chung. These Days, North Korea Does not Even Listen to China. *Chosun Ilbo*, August 7, 2006. Reprinted by BBC Monitoring Asia Pacific, August 10, 2006.

[124] Human Rights Watch. China: Protect North Korean Refugees, March 9, 2004. James D. Seymour. China: Background Paper on the Situation of North Koreans in China, A Writenet Report by commissioned by United Nations High Commissioner for Refugees, Protection Information Section, January 2005.

[125] Jane's Information Group, *op. cit.*

DPRK[126] and also took measures to halt banking transactions with North Korean entities and to curtail shipments of petroleum. China, however, did not agree to conduct inspections of shipments along its borders with North Korea. Some analysts indicate that Pyongyang may be growing weary of its lop-sided relations with Beijing and may be attempting to become more independent. Pyongyang may view nuclear weapons as a "trump card to intimidate China as much as the United States."[127]

Since the collapse of the Soviet Union, China has been the DPRK's largest trading partner and supplier of concessional assistance (through subsidized trade and direct transfers). As an export market and source of imports, however, North Korea plays a relatively minor role for China. In 2007, the DPRK ranked 68th among China's export markets — smaller than Peru, Egypt, or Hungary. As a source of imports, North Korea also ranked 68th — below Gabon, Yemen, or Belgium. **Table 8** shows China's merchandise trade with the DPRK.

Table 8. China's Merchandise Trade with the DPRK, 1995-2007
($ in millions)

Year	China's Imports	China's Exports	Total Trade	China's Balance
1995	63.609	486.037	549.646	422.428
1996	68.638	497.014	565.652	428.376
1997	121.610	534.411	656.021	412.801
1998	51.089	356.661	407.750	305.572
1999	41.722	328.634	370.356	286.912
2000	37.214	450.839	488.053	413.625
2001	166.797	570.660	737.457	403.863
2002	270.863	467.309	738.172	196.446
2003	395.546	627.995	1,023.541	232.449
2004	582.193	794.525	1,376.718	212.332
2005	496.511	1,084.723	1,581.234	588.212
2006	467.718	1,231.886	1,699.604	764.168
2007	581.521	1,392.453	1,973.974	810.932

Sources: Chinese (PRC excluding Hong Kong) data as supplied by World Trade Atlas.

China is a major source for North Korea of imports of petroleum. According to Chinese data, exports to the DPRK of crude oil reached $282.0 million and shipments of oil (not crude) totaled $95.4 million. These two categories accounted for 27% of all Chinese exports to the DPRK. China, however, does not appear to be

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[126] See UN Security Council Resolution 1718, October 14, 2006.

[127] Kahn, Joseph. China May Press North Koreans. *The New York Times*, October 20, 2006. P. A1.

selling this oil to North Korea at concessionary prices. In 2007, the average price for Chinese exports of crude oil to North Korea was $0.54 per kilogram, while it was $0.49 for such exports to the United States, $0.43 for South Korea, $0.48 for Japan, and $0.29 for Singapore.[128]

China also provides aid directly to Pyongyang. By bypassing the United Nations, China is able to use its assistance to pursue its own political goals independently of the goals of other countries. It is widely believed that Chinese food aid is channeled to the military. This allows the World Food Program's food aid to be targeted at the general population without risk that the military-first policy or regime stability would be undermined by foreign aid policies of other countries.[129]

In November 2003, China reportedly transferred responsibility for securing its border with North Korea from the police to its army.[130] Many of China's two million ethnic Koreans live along this border, and it is a favorite crossing point for refugees from North Korea. In 2006, China built a 20-kilometer long fence along its border with North Korea. It is located primarily along areas where the Yalu River dividing the two countries is narrow and the river banks low.[131] Much of China's trade with the DPRK goes through the port of Dandong on the Yalu River. In 2002, 40% of Chinese exports to and 11% of its imports from North Korea passed through Dandong.[132]

China's major imports from North Korea include mineral ores, mineral fuels (coal), woven apparel, fish and seafood, iron and steel, and wood. China's major exports to North Korea include mineral fuels and oil, meat, electrical machinery, machinery, plastic, man-made filament, vehicles, and iron and steel. (See section of this report on foreign investments for activity by Chinese firms in the DPRK.)

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[128] Average price calculated by World Trade Atlas using Chinese trade statistics.

[129] Babson, Bradley O. *Towards a Peaceful Resolution with North Korea: Crafting a New International Engagement Framework* Paper presented at a conference sponsored by the American Enterprise Institute, Korea Economic Institute, and Korea Institute for International Economic Policy, Washington, DC, February 12-13, 2004.

[130] Foley, James. China Steps Up Security on North Korean Border. *Jane's Intelligence Review*, November 1, 2003.

[131] China Erects Massive Fence on N. Korean Border After Test. *World Tribune.com*, October 25, 2006. Schafer, Sarah. Threatening the Whole World, on China's Border with North Korea, Local Villagers Fear the Fallout from Pyongyang's Nuclear Aspirations, *Newsweek*, October 12, 2006. (Internet edition).

[132] Lee, Chang-hak. China's Trade with N.K. Via Dandong Exceeds US $200 million. KOTRA, February 21, 2003.

Japan-DPRK Economic Relations

Japan's economic relations with North Korea have declined sharply as tension over Pyongyang's nuclear and missile programs has spiked. After North Korea test launched several missiles in July 2006 and then detonated a nuclear device in October 2006, Japan imposed strict unilateral sanctions, causing bilateral trade to plummet. Japan banned imports and most North Korean nationals from entering Japan, prohibited all North Korean ships from entering Japanese ports, and outlawed the export of "luxury goods" to North Korea, including caviar, jewelry, liquor, and any food known to be favored by North Korean leader Kim Jong-il. Tokyo has also ceased sending any humanitarian aid to North Korea, and has refused to provide economic or energy assistance until their concerns with Pyongyang are resolved.

This pattern is a reversal of earlier economic relations. Although Japan and North Korea have never established official diplomatic relations, the two nations maintained significant economic ties for well over a decade. From the end of the Cold War, Japan was second only to China among North Korea's top trading partners. Bilateral trade declined considerably in the 1980s, but the drop was attributed primarily to the steep overall downturn of the North Korean economy as much as the state of bilateral relations. Before relations deteriorated, Japanese leaders made several efforts to normalize relations with North Korea, promising considerable economic assistance to the country. Since 2002, however, North Korea's provocative missile and nuclear device tests, along with the issue of Japanese citizens kidnapped by North Korean agents in the 1970s and 1980s, has stalled any further diplomatic progress and retarded economic relations. From 2001-2005, Japan's share of North Korean trade declined as China, South Korea, and Russia expanded trade with Pyongyang.

Table 9. Japan's Merchandise Trade with the DPRK, 1994-2007

($ in millions)

Year	Japan's Imports	Japan's Exports	Total Trade	Japan's Balance
1994	328.313	171.092	499.405	-157.221
1995	338.073	253.798	591.871	-84.275
1996	290.745	226.480	517.225	-64.265
1997	301.796	178.942	480.738	-122.854
1998	219.489	175.137	394.626	-44.352
1999	202.564	147.839	350.403	-54.725
2000	256.891	206.760	463.651	-50.131
2001	225.618	1,064.519	1,290.14	838.901
2002	235.840	132.645	368.485	-103.195
2003	174.390	91.445	265.835	-82.945
2004	164.299	88.743	253.042	-75.556
2005	132.277	62.505	194.782	-69.772
2006	77.776	43.816	121.592	-33.96
2007	0.000	9.331	9.331	9.331

Source: Japanese data as supplied by World Trade Atlas.

As indicated in **Table 9**, by 2007, total trade between Japan and the DPRK had fallen to $9 million from $1,290 million in 2001. In 2007, Japan had no imports from the DPRK and reported exports of $3 million in bicycles, $2 million in trucks, and $0.3 million in public transport vehicles. North Korea is Japan's 168th largest export market, below Namibia, Bhutan, and Botswana.

Before Japan stopped importing from North Korea, seafood made up almost half of the North's exports to Japan, followed by electrical machinery, aluminum and articles thereof, mineral fuels, and apparel. North Korean clams and *matsutake* mushrooms are particularly prized in the Japanese market. Japan sent items such as vehicles, electrical machinery, boilers/reactors, manmade filaments, wool, and articles of iron or steel to North Korea. Some Japanese lawmakers have argued that Japan should expand the ban on imports from North Korea to cover exports as well.

Japan's food aid to North Korea has also dwindled as relations soured. The pattern of Japanese aid reflects developments in the political relationship between Tokyo and Pyongyang: shipments began in 1995 and 1996 when relations warmed, were temporarily suspended periodically as tensions mounted, and eventually ceased altogether in late 2004 because of disagreement over the abduction issue. Between 1995 and 2004, Japan provided 1.2 million metric tons of humanitarian food aid to North Korea, mostly through the United Nations World Food Program.[133]

A group of pro-Pyongyang ethnic Koreans living in Japan known as the Chosen Soren (Chongryun in Korean) in the past provided North Korea with additional funds in the form of cash remittances and, possibly, facilitated illicit trade such as drug trafficking and counterfeiting. Although the exact amount of remittances is unknown, the total appeared to be in the neighborhood of $100 million per year but declined sharply since the early 1990s. A series of scandals involving ethnic Korean banks in Japan revealed that money was illegally channeled to North Korea through the network of Chosen Soren-affiliated credit unions. Following the missile tests in 2006, Japan froze fund transfers and overseas remittances by 15 groups and one individual suspected of links to North Korean weapons programs, and established rules that require financial institutions to report to the Japanese government remittances overseas of more than 300 million yen.

Russia-DPRK Economic Relations

Russian reforms and the end of the Cold War greatly reduced the priority of the DPRK in the strategy of Russian foreign policy. Following Soviet support of North Korea in the Korean War, the USSR provided assistance to Pyongyang that helped equip its military and create its heavy industrial sector. In 1998, at the peak of the bilateral relationship, about 60% of North Korea's trade was with the Soviet Union. Much of the trade was in raw materials and petroleum that Moscow provided to Pyongyang at concessional prices. Relations between the two cooled in the 1990s

[133] CRS Report RL31785, *Foreign Assistance to North Korea*, by Mark Manyin.

as Russia recognized South Korea, announced that trade with North Korea was to be conducted in hard currencies, and opted out of its bilateral defense agreement.[134]

Recently, overall relations between Russia and North Korea have been improving. Russia is upgrading its railway connections with the DPRK and has been participating in an ambitious plan to build a trans-Korean railway. As is the case with China and South Korea, Russia is critical to North Korean security, since Russia shares a border with the DPRK, and Russian cooperation would be necessary to enforce any security guarantee. As fuel aid from abroad has decreased, moreover, North Korea has turned again toward Russia as a source of supply.

An observer of Russia-DPRK relations views Russian policy toward North Korea as an important component of Moscow's general strategy toward what it considers the critically important Asia-Pacific region. Russia's strategic course includes a calculating and pragmatic approach toward North Korea and the Korean Peninsula in general. Moscow has gained unique and exclusive communications capabilities with Pyongyang based on the development of trust between the leadership of the two states at the highest political levels.[135]

This observer also points out that the perspective of Russia on the North Korea nuclear issue does not fully coincide with that of the United States. While Moscow has insisted on a denuclearized Korean peninsula and the irreversible dismantlement of North Korea's nuclear weapons and nuclear development programs, it also firmly supports the peaceful resolution of the issue. Russia is a participant in the Six-Party Talks. Moscow apparently has concluded that the Kim Jong-il regime does not face impending collapse, and therefore, outside pressure and economic sanctions intended to bring about regime change work only to increase tensions and the probability of a military confrontation. Russia also does not favor a Korean Peninsula unified by military force with American help. This would put U.S. forces on the Russia-Korean border. Rather, Russia supports a unified Korea that would maintain friendly relations with all countries, including Russia, and opposes foreign interference in the unification process.[136]

As is the case with China, Russia also is concerned that economic hardships in the DPRK push refugees across the border into Russian territory. Moscow also supported U.N. Security Council Resolutions in 2006 that condemned North Korea's missile and nuclear tests. This has cooled the relationship to some extent.

The DPRK's trade with Russian lags behind what it has been in the past. In 2007, North Korea ranked 88th among Russia's sources of imports (below Jamaica and Ghana) and 81st in terms of markets for Russian exports (below the Virgin Islands and Gibraltar). The increasing volume of Russian mineral fuel exports to the

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[134] Lunev, Stanislav. New Era in Russian-North Korean Relations. Newsmax.com, August 23, 2000.

[135] Vorontsov, Alexander. *Current Russia — North Korea Relations: Challenges and Achievements*. The Brookings Institution Center for Northeast Asian Policy Studies, February 2007, 24 p.

[136] *Ibid*.

DPRK has moved Russia past Japan, Germany, and Thailand to become North Korea's third largest trading partner.

Major Russian exports to the DPRK include mineral fuels, aircraft, iron/steel, wood and pulp, paper, and non-rail vehicles. The large increase in Russian exports have come mostly in mineral fuels which increased from $20 million in 2002 to a peak of $224.4 million in 2005 before declining to $190.6 million in 2006 and $73.5 million in 2007. Of these, solid fuels from coal and oil accounted for the majority of the exports. Pyongyang has had to turn to Russia as a source for energy as supplies of fuel oil from the United States, Japan, and South Korea were curtailed as the Six-Party Talks bogged down. Major Russian imports from North Korea include machinery, electrical machinery, and manmade staple fibers.

Table 10. Russia's Merchandise Trade with the DPRK, 1994-2006

($ in millions)

Year	Russia's Imports	Russia's Exports	Total Trade	Balance
1994	44.00*	52.00*	96.00*	8.00*
1995	15.00*	70.00*	85.00*	55.00*
1996	347.00*	525.00*	872.00*	178.00*
1997	16.790	72.449	89.239	55.659
1998	8.463	56.497	64.960	48.034
1999	7.208	48.507	55.715	41.299
2000	7.633	35.631	43.264	27.998
2001	14.664	56.099	70.763	41.435
2002	10.317	47.404	57.721	37.087
2003	2.903	112.343	115.246	109.440
2004	4.575	204.665	209.240	200.090
2005	6.862	224.402	231.264	217.540
2006	20.076	190.563	210.639	170.487
2007	33.539	126.068	159.607	92.529

Sources: Russian data as supplied by World Trade Atlas.

*1994-96 data from International Monetary Fund. *Direction of Trade Statistics*.

In December 2006, Russia reportedly agreed to write off some 80% of the $8 billion in debt owed it by the DPRK. North Korea had borrowed the funds in the 1960s to build power plants. This opens the way for Russia to engage in more economic cooperation with the DPRK and to facilitate progress in the Six-Party Talks.[137]

U.S. Interests, Strategy, and Policy

The three legs of any grand strategy toward the DPRK include economic, diplomatic, and military means to accomplish U.S. goals and protect U.S. national interests. This report examines the economic side of this triad of strategic policy instruments but also reviews the diplomatic and military aspects of U.S. policy in order to provide a policy context.

U.S. Interests, Goals, and Strategy

The DPRK threatens several U.S. national interests. It threatens U.S. security through its development and potential proliferation of nuclear weapons as well as other weapons of mass destruction. North Korea's missile delivery systems currently can reach South Korea and Japan, and it is reportedly developing a missile (Taep'o-dong 2) that can reach the continental United States.[138] Its conventional forces are concentrated along the demilitarized zone within striking distance of South Korean population centers and U.S. forces. North Korea's dictatorial, communist, and oppressive regime headed by Kim Jong-il runs counter to U.S. values of freedom, liberty, human rights, democracy, and economic choice.

The national security strategy of the United States touches on North Korea mainly through the following broadly stated goals: (1) to prevent enemies from threatening the United States, allies, and friends with weapons of mass destruction; (2) to strengthen alliances to defeat global terrorism and to work to prevent attacks against the United States or friendly countries; (3) to work with others to defuse regional conflicts; (4) to ignite a new era of global economic growth through free markets and trade; and (5) to champion aspirations for human dignity.[139]

As applied to the DPRK, the immediate U.S. goals include (1) to halt or eliminate North Korea's development of nuclear or other weapons of mass destruction; (2) to prevent/halt proliferation of weapons of mass destruction, particularly to terrorist groups; (3) to curtail illegal and questionable activities by North Korea to include illicit sales of missiles,[140] dealing in illegal drugs, and counterfeiting of currency; (3) to reduce the threat of war on the Korean peninsula; (4) to ensure that North Korea does not participate in international terrorist activity; (5) to induce economic, political, and societal change in the country that could bring

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[137] Russia to Forgive Most of N. Korea's Debt. The Chosun Ilbo (digital version), January 5, 2007.

[138] See CRS Report RS21473, *North Korean Ballistic Missile Threat to the United States*, by Andrew Feickert.

[139] The White House. *The National Security Strategy of the United States of America*. September 2002.

[140] See CRS Report RS21473, *North Korean Ballistic Missile Threat to the United States*, by Steven A. Hildreth.

about favorable changes in the Kim regime, in governance, in the standard of living of its people, and in attitudes toward the United States; and (6) to enhance the security of South Korea and Japan with respect to the DPRK.

Conventional wisdom with respect to North Korea includes the following assumptions: (1) without stringent monitoring mechanisms, Pyongyang probably will cheat on any agreement; (2) North Korea regularly engages in illicit activity and may take actions opposed to normally accepted international law or standards of national behavior; (3) economic privation in North Korea mainly affects the population outside of the political and military elite, particularly in the countryside; (4) popular sentiment opposing the current regime, although reportedly on the rise, appears weak or suppressed sufficiently for Kim Jong-il to remain in power for an indefinite period of time; (5) a U.S. military attack on North Korea would result in an immediate counter-attack on Seoul and other targets in South Korea using existing conventional weaponry that would cause extensive damage; and (6) any North Korean use of nuclear bombs on the United States or its allies would trigger retaliation that likely would destroy Pyongyang, its military installations, and other targets.

Other factors to be considered include the following: (1) South Korea has been pursuing a policy of rapproachment and eventual normalization of relations with North Korea, although it maintains considerable distrust and hostility toward the country; (2) among the countries with interest in North Korea, China appears to have the most influence and economic and political interaction, although ties with Russia still are strong, and South Korea has been a major source of economic assistance and trade; (3) Japan would likely provide a large monetary settlement to Pyongyang in return for its years of occupation should a peace settlement be reached; (4) the border between China and North Korea is porous, particularly in the winter when the rivers are frozen and electricity so scarce that few lights operate at night; (5) centrally planned, communist economies, that have been operating for several decades create distortions and consumer dissatisfaction that enable rapid transition to a market economy once those economies are liberalized; (6) economic reform and the opening of trade and investment in North Korea would likely induce large increases in production and economic well-being, but most DPRK production facilities are so lacking in new machinery and equipment that major investments would be needed to raise them to world standards; and (7) the level of distrust between the United States and the DPRK is deep and long-standing.

Given U.S. interests and goals, it appears that U.S. strategy may include the following: (1) convincing the Pyongyang regime that developing nuclear weapons decreases, not increases, its security; (2) creating tension within the regime over the allocation of resources between nuclear and conventional weapons and between the military and civilian economies; (3) weakening the hold by Pyongyang on the daily lives of its citizens and support of Kim Jong-il by fostering alternative centers of power, facilitating the transition to a market economy, and increasing information flows into the country; (4) depriving the central government of revenues derived from illicit activities; and (5) eliciting greater cooperation from China and Russia to induce them to apply more pressure on Pyongyang to make suitable concessions and carry through on commitments deriving from the Six-Party Talks.

An economic strategy would be to generate interests in and dependency on international trade, investment, and greater interaction with the outside world that could weaken the hold by Pyongyang on the daily lives of citizens and bring the country more into the globalized world. Such economic liberalization also could reduce pressures on North Korea to engage in illicit trade in order to cover its trade deficit and diminish the need for Pyongyang to saber rattle in order to divert attention from its domestic problems.

Major U.S. policy options, given the above interests, goals, assumptions, and strategies with respect to the DPRK, include the following.

- Continue current policies of negotiations with the promise of lifting sanctions as DPRK denuclearization progresses under the Six-Party process.

- Intensify negative pressures on the DPRK (tighten economic and financial sanctions, restrict trade between North Korea and countries such as China, Japan, South Korea, and Europe, and discourage foreign investment in the DPRK).

- Increase engagement to include positive incentives for reform over the long term (loosen sanctions, encourage reforms, facilitate foreign investment, promote trade, and allow North Korea to join the International Monetary Fund and Asian Development Bank).

- Combine policy options into a package of incentives.

Current U.S. Policy

Current U.S. policy with respect to the DPRK includes (1) diplomatic engagement through the Six-Party Talks and related bilateral meetings; (2) non-proliferation efforts, including the Proliferation Security Initiative; (3) international efforts to counter trafficking by North Korea in illegal drugs, counterfeit currency, or other contraband; (4) maintenance of U.S. military forces in South Korea, Japan, and elsewhere in the Pacific as a credible deterrent against North Korean aggression; (5) economic sanctions and diplomatic isolation; and (6) keeping North Korea from joining international financial institutions.

As the Bush Administration nears a close, it has shown a new willingness to negotiate directly with the DPRK, although it maintains the umbrella of the Six-Party Talks. The February 13, 2007, Six-Party Agreement includes a provision that North Korea is to freeze its nuclear installations at Yongbyon and invite back the International Atomic Energy Agency to monitor the freeze. North Korea also is to discuss with the other six parties "a list of all its nuclear programs, including plutonium extracted from used fuel rods" from the five megawatt reactor (which North Korea claims to have reprocessed into nuclear weapons-grade plutonium). In exchange, South Korea is to provide financing for 50,000 tons of heavy oil to be shipped to the North. The DPRK and the United States also are to start talks "aimed at resolving bilateral issues and moving toward full diplomatic relations" and the United States was to settle the Banco Delta Asia issue. Under the Agreement, North Korea and Japan also were to "start bilateral talks" toward normalization of relations on the basis of settlement of "outstanding issues of concern" (which Japan interprets as requiring a settlement of the issue of North Korea's kidnapping of Japanese citizens).

The February 2007 Agreement represented a clear change in strategy by the United States and other parties to the talks. For the first time, the Banco Delta Asia action was linked by the United States to the Six-Party Talks and nuclear issues. In essence, the United States agreed to see that the Banco Delta issue was settled before Pyongyang would have to take action to invite International Atomic Energy Agency inspectors back into the country and to shut down its nuclear plant. For the DPRK, this meant that the $25 million in frozen funds from Banco Delta accounts would be released first. This was done. The Agreement also implied that a strategy of regime change appeared to be off the table. The question now is whether the DPRK will live up to its commitments under the Agreement and what leverage the United States, China, and other participants have to ensure Pyongyang's compliance.

As a result of the February 2007 Six-Party Agreement, the United States has begun providing fuel and food aid and has held out the prospect of eventual normalization of relations with the DPRK in response to specific disclosure and other actions by Pyongyang in regard to its nuclear program.[141] On June 26, 2008, President Bush announced the lifting of the application of the Trading with the Enemy Act (TWEA) with respect to the DPRK and notified Congress of his intent to rescind North Korea's designation as a State Sponsor of Terrorism.[142] According to the State Department, these actions were taken following the DPRK's submission of a declaration of its nuclear programs as agreed to under the Six Party Talks. The earliest date (August 11, 2008) for the State Sponsor of Terrorism recision has passed. The Secretary of State reportedly is waiting for more complete verification on the part of the DPRK before proceeding.

What is evident from the experience of the past seven years is that Pyongyang's stalling and the United States' refusal to negotiate bilaterally (even under the umbrella of the Six-Party Talks) provided time for Pyongyang to continue to pursue its nuclear program. Given North Korea's nuclear test in 2006, it is now obvious that the DPRK actually had created a nuclear device and may still have as many as five or six still in its arsenal.[143]

North Korea claims that the reasons for its nuclear program are to deter an attack by the United States and to use the bombs if South Korea starts a war or to devastate Japan in order to prevent the United States from participating in such a

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[141] For details on the Six-Party Talks, see CRS Report RL33590, *North Korea's Nuclear Weapons Program*, and CRS Report RL33567, *Korea-U.S. Relations: Issues for Congress*, both by Larry A. Niksch.

[142] U.S. Department of State. "North Korea: Presidential Action on State Sponsor of Terrorism (SST) and the Trading with the Enemy Act (TWEA)." Fact Sheet, June 26, 2008. This began the clock on a 45-day period of prior notification of Congress (ending August 11) for delisting North Korea as a state sponsor of terrorism.

[143] For details, see CRS Report RL34256, *North Korea's Nuclear Weapons: Latest Developments* by Mary Beth Nikitin.

war.[144] The nuclear program also enables it to gain international prestige, to exercise a degree of hegemony over South Korea, and to extract economic assistance from other countries. Pyongyang is unlikely to abandon this nuclear program without significant changes to the underlying reasons for the program's existence. Its fear of being attacked had been exacerbated by its inclusion in the "axis of evil," the Bush doctrine of preemptive strikes, and the U.S.-led invasion of Iraq.[145] Some also consider Pyongyang's nuclear program to be a bargaining chip to be traded for economic assistance and to gain international recognition.

What also can be said about U.S. policy is the renewed willingness to negotiate bilaterally under the Six-Party process, the Banco Delta Asia action, poor economic conditions and crop harvests in the DPRK, and pressures by China, South Korea, and Japan have brought some apparent progress in situation with North Korea. Precisely what Pyongyang's intentions are is still murky, but it is clear that the DPRK is now placing a higher priority on food supply and economics in policymaking.

After North Korea's 2006 nuclear test, moreover, it became evident that even China opposed the path Pyongyang was taking. Following the nuclear test, the United States took the issue to the United Nations. The resulting UN Security Council Resolution 1718 (October 14, 2006), called on North Korea to abandon its nuclear and missile programs and imposed several sanctions. The resolution imposed an arms embargo on North Korea, banned trade in materials related to ballistic missiles or weapons of mass destruction, and barred exports of luxury goods to the DPRK. It also froze funds and other financial assets owned by people connected with North Korea's unconventional weapons program and banned travel by such people. China and Russia supported this resolution. Japan responded by curtailing imports from and travel to North Korea, banned North Korean ships from entering its ports, and prohibited exports of 24 luxury products to the DPRK.

It appears, however, that despite deep privation and negative growth during the mid-1990s, economic sanctions had little effect on Pyongyang's behavior in ways that would achieve U.S. ends. The ruling elite and military have first priority on scarce food and other supplies. The Kim regime allots economic privileges to its insiders. Peasants may starve, but ranking communist party members live in a separate world of relative luxury.[146] The poor economic conditions also do not appear to have materially undermined the Kim regime. Experts consider internal dissident forces too weak and Kim's control over his military too strong for a domestic *coup* to occur.[147] Pyongyang has taken halting steps toward opening its

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[144] Jane's Information Group. Armed Forces, Korea, North. Jane's Sentinel Security Assessment, March 4, 2003.

[145] Laney, James T. and Jason T. Shaplen. "How to Deal With North Korea," *Foreign Affairs*, March/April 2003. p. 20-21.

[146] BBC Monitoring, Asia Pacific. Former Bodyguard of North Korean Leader Interviewed, October 13, 2003, p. 1.

[147] The only significant power base that might challenge the regime is the military. Since Kim Jong-il became Chairman of the National Defence Commission, however, he has promoted 230 generals. Most of the army's 1,200-strong general officer corps owe their allegiance to him. Jane's Information Group, "Internal Affairs, Korea, North," *Jane's*

(continued...)

economy to international investment and has allowed more private markets, but these are similar to policies nearly all centrally planned economies are taking, and China and Russia have been recommending that North Korea adopt them also.

Irrespective of whether the U.S. economic sanctions worsened North Korea's economy, the poor state of the North Korea's agriculture and industries has indirectly affected U.S. national interests. It has necessitated humanitarian aid and has generated a deficit in trade that Pyongyang has attempted to fill by dealing in illegal drugs and missiles. Food scarcity also has pushed numerous refugees into China and South Korea.

In terms of non-proliferation, the Proliferation Security Initiative now has more than 60 governments participating (including Russia). Although aimed at stopping trade in weapons of mass destruction and their components, the prospect of ships being inspected complicates North Korean efforts to smuggle illicit weapons, drugs, and counterfeit currency.[148]

The Six-Party Talks

Current engagement with North Korea is being conducted under the Six-Party Talks plus bilateral discussions between Pyongyang and other nations. The Talks include the United States, DPRK, China, Japan, South Korea, and Russia. This brings all major players to the table, exposes China and Russia to North Korean obstinacy, enables China and Russia to exert pressure on Pyongyang, and includes Japan and South Korea who have direct interests in a peaceful resolution of the problem and are likely to be the major providers of aid to the DPRK. (For discussion of the talks, see CRS Report RL33590, *North Korea's Nuclear Weapons Development and Diplomacy*, and CRS Report RL33567, *Korea-U.S. Relations: Issues for Congress*, both by Larry Niksch.)

Table 11 summarizes the major negotiating priorities and bargaining chips for each side in the Six-Party Talks. Any policy package would have to address at least some of the priorities of each nation.

The highest priority for the United States, Japan, and Russia reportedly is for North Korea to scrap its nuclear weapons program in a manner that is verifiable. Japan also is concerned about North Korean missiles (which have been fired over Japan) and a full accounting for the abduction of its citizens. In addition, the United States, China, Russia, and Japan seek a stop to weapons proliferation, while Japan also seeks normalization of relations with the DPRK, and South Korea seeks a framework for rapprochement, possible reunification with the North, less military tension along the demilitarized zone (DMZ), and access to cheap labor and markets in the North.

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[147] (...continued)
Sentinel Security Assessment. June 10, 2003.

[148] The White House. Proliferation Security Initiative, Fact Sheet. September 4, 2003. U.S. Department of State. U.S. Notes First Anniversary of Proliferation Security Initiative. Press Release, June 1, 2004.

Table 11. Major Priorities and Bargaining Chips by Country in the Six-Party Talks with North Korea

Country	Priority	Bargaining Chips
United States	Complete, verifiable, and irrevocable scrapping of nuclear weapons; non-proliferation; human rights; peace treaty	Guarantee security and regime, economic aid, normalized diplomatic and trade relations
North Korea	Guarantee security and regime; establish diplomatic relations with the U.S. and Japan; reunification with South Korea on own terms; peace treaty	Scrap nuclear weapons and missiles, reduce tensions along DMZ
South Korea	Set framework for peaceful resolution and prosperity on the peninsula; reunification; access to North Korean labor and markets, non-nuclear Korean peninsula; human rights; peace treaty	Economic support, energy, business investment
Japan	Scrap nuclear weapons program and missiles; resolve abductions of Japanese citizens	Normalized diplomatic relations, economic support
China	Non-nuclear Korean peninsula, non-proliferation; continued influence on peninsula, weakening U.S. alliance with Japan and with South Korea; peace treaty	Economic support, alliance support
Russia	Scrap N. Korean nuclear weapons; non-proliferation; promote stability in N.E. Asia	Buffer diplomacy, energy assistance, business investment

Source: Adapted from: *The Seoul Economic Daily, 22* August 2003, cited in Hong Soon-Jick, "North Korean Nuclear Crisis: Prospects and Policy Directions," *East Asian Review*, Vol. 15, No. 3, Autumn 2003, p. 31.

Pyongyang's primary goals appear to include (1) preservation of communist rule under Kim Jong-il, (2) obtaining a security guarantee that would preclude a possible preemptive attack by the United States or its allies, (4) maintaining key elements of its nuclear weapons programs, (3) establishing diplomatic relations with the United States and Japan, (4) reunification with the South on its own terms, and (5) obtaining economic assistance for its ailing economy while maintaining its *juche* philosophy.

A risk of any policy package, such as the February 13, 2007 Agreement, is that North Korea might not scrap its nuclear program once energy and other aid starts to flow again, or the economy recovers sufficiently to become more self sustaining. Some surmise that the DPRK military is still resisting a complete shut-down and dismantling of the DPRK's nuclear program. If Pyongyang does not follow through on the Agreement, tensions could escalate, and punitive measures could be considered.[149] Absent a settlement of the nuclear issue, the world may have to learn

[149] See OPLAN 5026 - Air Strikes. [http://www.globalsecurity.org/military/ops/

to live with a nuclear-armed North Korea much as it has learned to live with a nuclear-armed Pakistan and India. Japan and South Korea would have to consider whether to develop nuclear capability themselves. Another risk of providing a policy package that includes real incentives could be that the United States would be perceived as being blackmailed and giving away too much to a dictator who regularly violates the human rights of his people.

The costs of a diplomatic solution to tensions with North Korea, however, seem relatively small compared with a nuclear arms race in Northeast Asia, the possibility of nuclear proliferation, or a preemptive military action. Opening trade and diplomatic relations would be of relatively low cost for the United States, but this would require resolution of certain issues. It also appears that in the final year of its second term, the Bush Administration is seeking a diplomatic success story with the DPRK. Negotiations with Pyongyang bilaterally and under the Six-Party Talks have proceeded in earnest. Humanitarian aid has been resumed. It is now up to Pyongyang to follow through on its commitments under the Six-Party Agreement, particularly to disclose all of its nuclear programs.

Possible Economic Incentives

The February 2007 Six-Party Agreement includes various economic incentives for the DPRK. The short-term incentives included providing fuel and releasing the Banco Delta funds, removing the DPRK from the U.S. terrorist list and recinding its designation as a State Sponsor of Terrorism, while long-term incentives include normalization of economic relations, and allowing North Korea to join multilateral financial institutions, such as the Asian Development Bank and International Monetary Fund. The list of potential economic incentives, include the following:

Normalizing Diplomatic Relations. Normalization of diplomatic relations with the DPRK would apply to the United States, Japan, and South Korea. North Korea already has diplomatic relations with China, Russia, and the European Union (including an embassy in London). Associated with normalizing relations would be a peace treaty formally ending the Korean War. For Japan, the DPRK would have to resolve certain issues, including a full accounting of the status of kidnapped Japanese citizens, North Korea's missile firings over Japan, and incursions by suspected DPRK espionage and drug-running ships into Japanese waters. Upon conclusion of these normalization talks, Japan is likely to offer $5 billion to $10 billion to North Korea in compensation for its occupation.[150]

Normalizing diplomatic relations allows countries to communicate with each other in a more direct fashion, enables diplomats to gather information directly, and provides more interaction on a personal level. Normalized relations can help to overcome the Pyongyang propaganda machine both within the DPRK and on the world stage. Normalization, however, can imply that the United States is willing to tolerate conditions in North Korea. This may be unacceptable to some. Absent

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[149] (...continued)
oplan-5026.htm]

[150] See CRS Report RL32161, *Japan-North Korea Relations: Selected Issues*, by Mark Manyin.

normalized relations, Washington could seek a relationship similar to that with Cuba. Even without diplomatic ties, the U.S. mission in Havana is attached to that of Switzerland and maintains a staff similar in size to a regular embassy. (North Korea has been a member of the United Nations since 1991 and has representatives in New York.) Japan has initiated talks with Pyongyang that could lead to normalized relations, and South Korea has been seeking diplomatic ties and possibly some form of reunification in the future. In 2007, bilateral talks between Japan and the DPRK on normalization were stymied by the abduction issue, but they have resumed in 2008.

Negotiating a Trade Agreement. After normalization, the United States could negotiate a trade agreement with the DPRK that would cover goods, services, and investments and could be modeled after the 2001 bilateral trade agreement concluded between the United States and the Socialist Republic of Vietnam.[151] Upon implementation of the trade agreement, each country would accord the other normal trade relations (most favored nation) status. The immediate effect would be to allow North Korean exports to the United States to enter at the lower rates of duty accorded to nearly all other nations of the world. The trade agreement also could cover investment and other U.S. interests.

While the DPRK's market currently is small, eventually it could re-industrialize and become a larger economic player in the region. Liberalization of North Korean trade and investment relations, moreover, can work through the economy in the same way that it did in China and Russia by exposing the public to the benefits of increased wealth. The major negative to establishing trade with North Korea is that, unless it is part of a larger package that includes other concessions, the United States could be viewed as exchanging an important bargaining chip for minimal gain.

Easing U.S. Sanctions. The United States could ease economic sanctions on North Korea if the country resolves the issues that caused the sanctions to be imposed initially. Since North Korea's other trading partners have more liberal trade with North Korea, it is mainly American companies and traders that are impacted by the sanctions. Pyongyang can spend its available foreign exchange in any of a number of world markets — in China, Russia, South Korea, Europe, or elsewhere. Moreover, as North Korea opens its economy, U.S. businesses would be able to decide whether or not to invest there based on their own economic interests and not because they are hindered from doing so by U.S. law.

Allowing the DPRK to Join International Financial Institutions (IFIs). The United States could stop blocking the DPRK from joining the major IFIs, particularly the Asian Development Bank, World Bank, and International Monetary Fund.[152] Pyongyang is particularly interested in joining the Asian Development Bank, but IFI procedures require membership first in the International Monetary Fund. The IMF requires certain economic data which the World Bank or Asian

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[151] The White House, George W. Bush. "Presidential Proclamation: To Implement the Agreement Between the U.S. and Socialist Republic of Vietnam on Trade Relations," June 1, 2001.

[152] For information on requirements to join the International Monetary Fund, see Primorac, Marina. How Does a Country Join the IMF? *Finance & Development*, June 1991, vol. 28, Issue. 2; pp 34-5.

Development Bank needs to evaluate projects and loan requests. Membership in IFIs requires that a country establish data gathering and reporting mechanisms as well as open their country to visits, surveys, or assessments by the IFI. As an incentive, a special fund could be set up in the World Bank or Asian Development Bank to assist North Korea in its economic transition. This fund could be financed by Japan or South Korea in conjunction with their normalization of relations with the DPRK.

Removing the DPRK from the Terrorism List. The 45-day period for notification to Congress of the U.S. intent to rescind the listing of the DPRK as a State Sponsor of Terrorism passed on August 11, 2008. If the President rescinds this listing, North Korea would become eligible for U.S. foreign aid, loans from the U.S. Export-Import Bank, loans from any international financial organizations in which it has membership, and an easing of U.S. export control requirements.[153]

Fuel and Food Aid. The Bush administration resumed shipping fuel and food aid on a humanitarian basis to the DPRK. South Korea also has resumed shipments of fuel, but it has insisted that food and fertilizer aid be sent only if requested by North Korea.

Products from the Kaesong Industrial Complex. When South Korea was negotiating the proposed Korea-U.S. Free Trade Agreement (signed but not yet approved by Congress), they asked that products from the Kaesong Industrial Complex in North Korea be included under the FTA and be accorded duty-free entry into the United States. The resulting FTA language, however, does not provide for duty-free entry into the United States for products made in Kaesong. Annex 22-B to the proposed FTA, however, does provide for a Committee on Outward Processing Zones (OPZ) to be formed and to designate zones (such as the Kaesong Industrial Complex) to receive preferential treatment under the FTA. Such a designation apparently would require legislative approval by both countries.

Legislative Action

Major congressional action with respect to security and human rights aspects of U.S.-DPRK relations is included in CRS Report RL33567, *Korea-U.S. Relations: Issues for Congress*, by Larry A. Niksch; *North Korea's Nuclear Weapons: Latest Developments,* by Mary Beth Nikitin; and *North Korea: Terrorism List Removal?* by Larry A. Niksch.

[153] See CRS Report RL33567, *Korea-U.S. Relations: Issues for Congress*, by Larry A. Niksch.