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## **The North Korean Economy: Background and Policy Analysis**

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# The North Korean Economy: Background and Policy Analysis

## Summary

This report provides an overview of the economy of the Democratic People's Republic of Korea (DPRK) or North Korea, its external economic relations, attempts at reform, and U.S. policy options. Along with the United States, North Korea's major trading partners — China, Japan, South Korea, and Russia — form the so-called Six Parties, which are currently engaged in talks to resolve issues raised by the DPRK's development of a nuclear weapons program.

The economy of North Korea is of interest to Congress because it provides the financial and industrial resources for Pyongyang to develop its military, constitutes an important "push factor" for potential refugees seeking to flee the country, creates pressures for the country to trade in arms and illegal drugs, is a rationale for humanitarian assistance, is tied to Pyongyang's program to develop nuclear energy and bombs, and creates instability that ultimately affects the economy of South Korea. The North Korean threat to sell nuclear weapons material could be driven in part by its need to generate export earnings. The dismal economic conditions also foster forces of discontent that potentially could turn against the Kim regime — especially if knowledge of luxurious lifestyle of communist party leaders becomes better known or as the poor economic performance hurts even Pyongyang's elite. The North Korean economy also is a target of economic sanctions.

Economic conditions in North Korea have been dismal for those out of the center of power. Mass starvation — eased only by international food aid and other humanitarian assistance — has stalked the countryside. With the termination of aid from Russia in the form of fuel and other raw materials at concessional prices, industrial production in North Korea has shrunk, from 60% of the economy in 1987 to 27% in 2002. The country has embarked on a program of economic reforms that include raising wages, allowing prices to better reflect market values, reducing dependence on rationing of essential commodities, less centralized control over factory operations, and opening foreign trade zones for international investment.

North Korea has extensive trade relationships with China, South Korea, Japan, and Russia. Because of U.S. economic sanctions and lack of normal trade relations status, U.S. imports from North Korea are virtually nil while U.S. exports in 2003 were \$8 million. The DPRK runs a \$1 billion deficit per year in its international trade that it funds primarily through receipts of foreign assistance and various illicit or questionable activities, such as weapons sales, illegal drugs, and counterfeiting.

In the current Six-Party Talks, economic assistance (including fuel oil) is a major bargaining chip in seeking the complete dismantling of the DPRK's nuclear program. Economic policy options include normalizing relations with Pyongyang, negotiating a trade agreement, lifting economic sanctions, allowing the DPRK to join international financial institutions, and removing the country from the terrorism list.

This report will be updated as conditions warrant.

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# The North Korean Economy: Background and Policy Analysis

The Stalinist state of North Korea (Democratic People's Republic of Korea or DPRK) faces a dilemma as its economy stagnates. The end of the Cold War negated its value as a surrogate fighter for the former Soviet Union and China and as a standard bearer for the international proletarian revolution. The country's leaders in Pyongyang have very limited options remaining as they have placed their nuclear weapons program on the bargaining table in exchange for economic assistance, security assurance, and normalization of relations with the United States, Japan, and South Korea.

In the current negotiations with the DPRK, the United States has five major policy levers: economic assistance, economic sanctions, non-proliferation enforcement, 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.<sup>1</sup> 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 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 picture of North Korea that is clear enough to address different policy paths.

U.S. interest in the moribund North Korea economy goes beyond the leverage that economic assistance provides in the current negotiations. The economy provides

## North Korea at a Glance

**Land Area:** 120,540 sq km, slightly smaller than Mississippi

**Population:** 22.5 million (2002 est.)

**Head of State:** Kim Jong-il

**Capital:** Pyongyang

**Life expectancy:** 62.4 years (2002 est.)

**GDP:** \$22.85 billion at purchasing power parity in 2003

**GDP Per Capita:** \$1,000 at PPP (in 2003)  
\$818 at current prices

**GDP Composition:** agriculture: 30%  
industry: 39%, services: 31%

**Exports:** \$1,066 million f.o.b. (2003)

**Export Commodities:** minerals, metallurgical products, manufactures (including armaments); textiles and fishery products

**Imports:** \$12,049 million c.i.f. (2003)

**Import Commodities:** petroleum, coking coal, machinery and equipment; textiles, grain

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<sup>1</sup> See CRS Issue Brief IB91141, *North Korea's Nuclear Weapons Program* and CRS Issue Brief IB98045, *Korea: U.S.-Korean Relations — Issues for Congress*, both by Larry A. Niksch.

the financial and industrial resources for Pyongyang to develop its military, constitutes an important “push factor” for refugees seeking to flee the country, creates pressures for the country to trade in arms and illegal drugs, provides the impetus for humanitarian assistance, is tied to Pyongyang’s push to develop nuclear energy and bombs, and creates instability that ultimately affects the economy of South Korea. The North Korean threat to sell nuclear weapons material seems to be driven in part by its need to generate export earnings to pay for imports. The dismal economic conditions also foster forces of discontent that potentially could turn against the ruling regime of Kim Jong-il — especially if knowledge of the luxurious lifestyle of regime leaders spreads or if the poor economic performance hurts even Pyongyang’s elite. The North Korean economy also is a target of U.S. economic sanctions.

This report notes that the worst of North Korea’s economic crisis seems to have passed, but the economy is still heavily dependent on foreign assistance to stave off starvation among a sizable proportion of its people. Another severe food crisis could occur with one bad harvest. About 40% of the population still suffers from malnutrition. Currently, Pyongyang’s reforms along with better weather and steady supplies of food aid are enabling the country to bridge its shortfall between food production and basic human needs. However, donor fatigue and competing humanitarian needs in Africa and elsewhere are depressing current donation levels. U.S. economic sanctions appear to be having minimal economic effect because the DPRK can turn to other countries for needed imports.

For the United States, the confrontation with the DPRK centers on security issues, but any resolution of the problem will likely contain a large economic component.

## Overview of the DPRK Economy

The North Korean economy is one of the world’s most isolated and bleak.<sup>2</sup> It was completely bypassed by the “economic miracles” of the past quarter century 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 countries of Asia. The “Stalinist” North Korean economy can be characterized by state ownership of means of production, centralized economic planning and command, 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 remains closed, the poorer its performance and the more dependent the country becomes on the outside world just to survive.

Pyongyang has embarked on a series of reforms that may ease the economic pressures over the long term. In the near term, however, major portions of the North Korean population are surviving primarily through transfusions of food and other economic assistance from abroad.

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<sup>2</sup> 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.

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 — as much as 30% 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 billion to the current \$45 million per year.<sup>3</sup> This added to disastrous domestic economic conditions in North Korea.<sup>4</sup> Food has been so scarce that North Korean youth are shorter than those in other East Asian nations.<sup>5</sup> 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 World Food Program (WFP), which has been feeding more than a quarter of North Korea's 22 million people, chronic malnutrition reportedly has fallen from 62 percent in 1998 to about 42 percent in 2003, while the proportion of underweight children has dropped from 61 to 21 percent.<sup>6</sup>

The DPRK's gross national product in 2003 in purchasing power parity prices (PPP) — prices adjusted to international levels — has been estimated at \$22.85 billion. This amounts to national income of about \$1,000 per capita in PPP values or roughly the same level as that of Tajikistan, Rwanda, or Kenya and considerably lower than that of China (\$3,920), Indonesia (\$2,830), or Mongolia (\$1,760), and dramatically lower than South Korea's \$17,300 in PPP values or \$8,910 at market prices.<sup>7</sup> A remarkable fact is that in the mid-1970s, living standards were higher in North Korea than in China. Now, North Korea is far behind its rapidly growing neighbor to the west.

As shown in **Figure 1**, growth in estimated real gross domestic product (GDP) in the DPRK was negative for most of the 1990s before beginning to recover in 1999. In 2003, growth was just 1.8%, up slightly from 1.2% in 2002. In essence, the economy is expanding again but still is below its level in 1990. In 1990, per capita gross national income was estimated at \$1,142. It dropped to \$573 by 1998 but has recovered moderately to \$818 in 2003. Agricultural production is back at the 1992 level primarily because of better weather and imports of fertilizer from South Korea.

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<sup>3</sup> Seddon, Mark. The Land That Time Forgot. *The Guardian (London)*, March 11, 2003. P. 2.

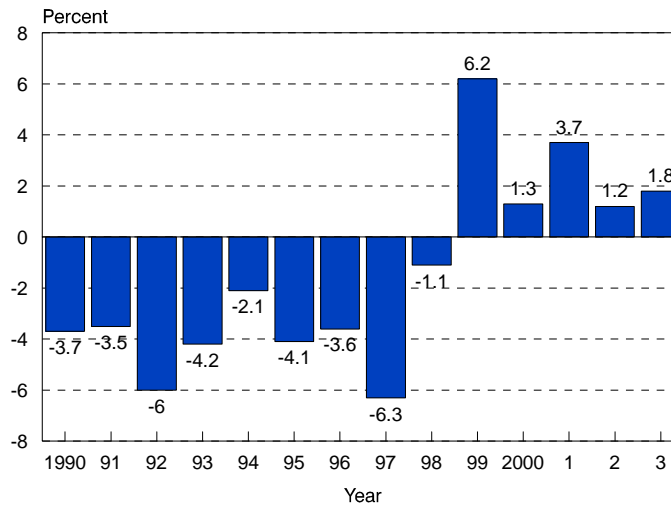
<sup>4</sup> Global Insight. Korea, North: Economic Trends: Economic Growth: Background. March 4, 2003. Subscription database at [<http://www.globalinsight.com/MyInsight/main.cfm?menuitem=S>].

<sup>5</sup> 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.

<sup>6</sup> 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.

<sup>7</sup> PPI figures are from U.S. Central Intelligence Agency, *World Factbook* at [<http://www.odci.gov/cia/publications/factbook/geos/ks.html>]. Gross national income at market prices for South Korea is from World Bank. *World Development Indicators 2003* at [<http://www.worldbank.org/data/wdi2002/tables/table1-1.pdf>].

**Figure 1. Growth in Real GDP in the DPRK  
1990-2003**



Source: Bank of Korea

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 according to South Korean observers, North Korea classifies its citizens into three ranks and fifty-one categories based on their ideological orientation. The categories are then used to allocate rations for daily necessities, jobs, and housing.<sup>8</sup> The elite in North Korean society (party cadres who are leaders in the military and bureaucracy) have enjoyed privileges far above the reach of the average citizen. 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.<sup>9</sup> 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 reduced), and the country's shadowy trade in everything from missile technology to fake banknotes and narcotics.<sup>10</sup>

## 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

<sup>8</sup> South Korea. Ministry of Unification. *North Korea Today*, August 14, 2001 (Internet edition).

<sup>9</sup> Chao, Julie. Despite Oppression, Cracks Appear in N. Korea Society. There's a Great Divide Between Regular and Elite Koreans in the 'Egalitarian' System. *The Austin American Statesman*, May 3, 2003. P. A18.

<sup>10</sup> Desperate Straits, Special Report (1). *The Economist*, May 3, 2003 (U.S. Edition).



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.<sup>11</sup> While 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 implications of *juche* have 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.<sup>12</sup> 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.<sup>13</sup> 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.<sup>14</sup>

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 decision makers may or may not understand advances in agronomy or manufacturing and tend to be motivated by non-economic 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.<sup>15</sup> 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.

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<sup>11</sup> See, for example: Natural Wonders Prove Kim Jong-Il’s Divinity: North Korean Media, Agence France Presse. May 3, 2003.

<sup>12</sup> 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).

<sup>13</sup> 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.

<sup>14</sup> Nam, Woon-Suk. Guidelines of Economic Policies. KOTRA, January 9, 2001.

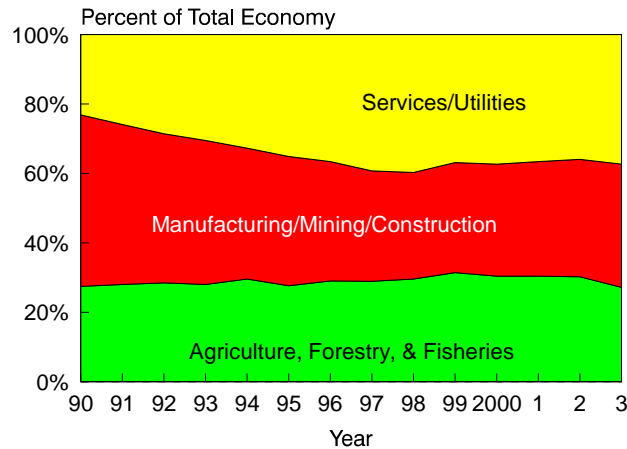
<sup>15</sup> Current experiments in agriculture are directed from Pyongyang with seven major tasks that include replacing chemical fertilizers with organic and microbial ones. See Yonhap News. N. Korea Eyes China as a Model for Development. May 11, 2004.

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 the demise of the Stalinist economy in Russia, have compelled the Pyongyang regime to introduce some economic reforms, or what they refer to as “adjustments.” To a large extent, they are adopting the Chinese model with economic reforms preceding any political reforms while eschewing the Russian model of political reform preceding and concurrent with economic reforms.

## 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, contrasted with the more agrarian 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%. (See **Figure 2**.)

**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. Reports indicate that factories have been 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.<sup>16</sup> 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. It has initiated some market-oriented reforms and allowed some liberalization that might bring new capital and production methods into its factories, but it is a long way from the reforms that have occurred in other socialist countries.

Some of the most advanced industries in North Korea are associated with its military. In 2002, Pyongyang reportedly spent an estimated \$14 billion (about 14% of its annual budget) to maintain its 1.1 million member military.<sup>17</sup>

The agricultural sector also is in dire straits. The economy depends heavily on collective farms that have been devastated by drought, lack of fertilizers and other inputs, antiquated farming methods, and a lack of incentives for private production. A report in 2003 from North Korea indicates that the situation along the border with China has deteriorated to the point that rates of starvation, disease, and even suicide are reaching a crisis point.<sup>18</sup> The situation arguably would be worse without international food and other humanitarian aid.

## Economic Reforms

In July 2002, Pyongyang announced a series of economic reforms 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 as an “economic adjustment policy,”<sup>19</sup> the actions appear to be a desperate attempt to revive the moribund economy, similar to what was done in China. 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. This, in turn, has raised pressures on Pyongyang to reform its economic system.

The adjustments feature 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

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<sup>16</sup> 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.

<sup>17</sup> N Korea’s Nuclear Weapons Threat May Be Bid for More Aid. Dow Jones International News, June 10, 2003.

<sup>18</sup> Gifford, Rob. North Korea (audio report), NPR Morning Edition, April 30, 2003.

<sup>19</sup> Hong, Ihk-pyo. A Shift Toward Capitalism? Recent Economic Reforms in North Korea. *East Asia Review*, vol. 14, Winter 2002. Pp. 93-106.

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 reform 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.<sup>20</sup> 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 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.<sup>21</sup> Now free markets and shopping centers that use currency, not ration coupons, are spreading. The Pyongyang Central Market, for example, is so crowded that a new, three-story supermarket is slated to open in late 2004. 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.<sup>22</sup>

The reforms also included 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,

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<sup>20</sup> Hong, Ihk-pyo, A Shift Toward Capitalism?, *East Asia Review*, Winter 2002. Pp. 96.

<sup>21</sup> 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.

<sup>22</sup> Lintner, Bertil. North Korea, Shop Till You Drop, *Far Eastern Economic Review*, May 13, 2004. P. 14-19.

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.<sup>23</sup> 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.<sup>24</sup>

Since 2000, the DPRK has attempted to emulate China's highly successful free trade zones (FTZ) by establishing the Sinuiju Free trade Zone on the northwestern border with China along with the proposed Gaesong (Kaesong) FTZ along the border with South Korea. The development of the Sinuiju FTZ has been stymied because of the arrest by Beijing of Chinese entrepreneur Yang Bin who was to head the project. The Gaesong FTZ, however, is showing promise. It is being managed by the Hyundai Corporation and the especially created Korea Land Corporation and is located just over the border 43 miles north of Seoul on the route to Pyongyang. This 810 acre FTZ aims to attract South Korean companies, particularly small and medium sized enterprises. Hyundai and the Korea Land Corporation plan to attract about 850 companies and create 220,000 jobs for North Koreans, but the ultimate success of the FTZ will depend on access (particularly across the demilitarized zone) from South Korea, the wage rate for labor (Pyongyang has been pushing for wage rates higher than those in China or Vietnam), and on the lifting of economic sanctions on exports from North Korea to American markets.<sup>25</sup> Still, more than 1,000 South Korean companies reportedly have expressed interest in moving into the industrial park, and the two countries have been building a rail link across their heavily armed border to connect the park with South Korea.<sup>26</sup> On June 30, 2004, a pilot complex at Gaesong was officially completed and is expected to be fully operating by November.<sup>27</sup>

## International Trade

Despite North Korea's isolation and emphasis on *juche*, it does trade with other countries. The foreign economic sector plays an important role for Pyongyang 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 surmise that North Korea's involvement in illicit or questionable

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<sup>23</sup> KOTRA, North Korea, Status of Induced Foreign Capital.

<sup>24</sup> K. Park. A Report on Visit to Rajin-Seonbong Region, January 4, 2001. KOTRA,

<sup>25</sup> Miyazaki, Jamie. Where are North Korea's Shenzhens? *Asia Times Online*, October 24, 2003.

<sup>26</sup> Yonhap News. Over 1,500 S.K. Firms Seek Move to N.K. Industrial Park. March 5, 2004. Posted by M.A. Cho in Korean Trade-Investment Agency (KOTRA) Press Bulletin, March 10, 2004.

<sup>27</sup> North Korean Industrial Complex Made Ready for Seoul's Investment. Yonhap (News), June 30, 2004.

economic activities, particularly illegal drug trade and sales of military equipment, may be an attempt to generate the foreign exchange necessary to fill this trade gap.<sup>28</sup>

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 the most 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 data, however, differ from North Korea's actual annual numbers because of the time lag in shipping (a product shipped from a country in late December of a year might not be recorded as arriving in North Korea until the following year), costs of freight and insurance (North Korean import data may be on a c.i.f. basis that includes insurance and freight charges that are not included in a country's export data), and differences in data gathering methods, coverage, and reporting. Detailed and reliable data on trade in military equipment and illegal drugs are notoriously difficult to obtain and to verify.

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 amounts it reports to the IMF for its commercial transactions with the North are considerably lower than the amounts it reports as inter-Korean trade [available from the Korean Trade-Investment Agency (KOTRA)]. The South Korean data 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 World Trade Atlas). This report uses a combination of trade totals from the IMF, partner country data from the World Trade Atlas, and intra-Korean trade from South Korea's KOTRA.

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. As shown in **Table 1**, in 2002 it exported \$1,274 million in merchandise exports (up from \$1,047 million in 2001) while importing \$2,436 million (down from 2001 but up slightly from recent years) for a merchandise trade deficit of \$1,162 million. Total exports in 2003 appear to have declined slightly. After exports dropped in 1998, they have recovered considerably in recent years, although they are still quite a bit under their 1990 levels.<sup>29</sup>

North Korea's major trading partners have been China, Japan, South Korea, Russia, Germany, Brazil, India, Thailand, Singapore, and Hong Kong. As shown in **Figure 3**, North Korea's major import sources have been China, Japan, South Korea, Russia, and Germany. Thailand and India also are becoming major suppliers. (See **Figure 2**.) Major imports by North Korea include machinery, minerals, plant

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<sup>28</sup> Eberstadt, Nicholas Statement. Hearing on Drugs, Counterfeiting, and Weapons Proliferation: The North Korean Connection, Subcommittee on Financial Management, the Budget, and International Security, U.S. Senate Committee on Governmental Affairs, May 20, 2003.

<sup>29</sup> (South) Korea Trade-Investment Agency (KOTRA).

products, and chemical products.<sup>30</sup> In particular, imports of energy materials and foods reflect Pyongyang's attempts to remedy these fundamental shortages.

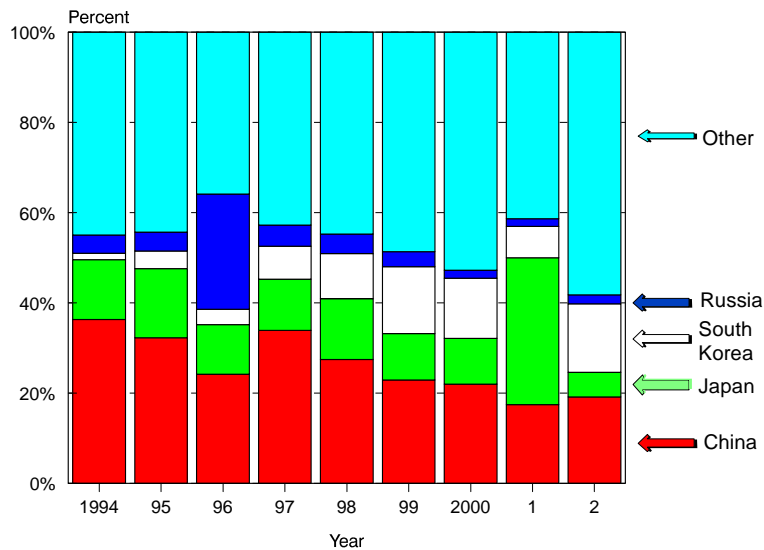
**Table 1. North Korean Trade by Selected Trading Partner  
Selected Years, 1994-2003**  
(\$ in millions)

North Korean Exports								
	1994	1996	1998	1999	2000	2001	2002	2003*
World	1,039	1,201	965	892	995	1,047	1,274	1,066*
China	181	69	51	42	37	167	271	395
Japan	328	291	219	203	257	226	234	174
S. Korea	176	182	92	122	152	176	272	289
Russia	44	347	8	7	8	15	10	3
Germany	57	32	24	20	20	21	26	15
North Korean Imports								
	1994	1996	1998	1999	2000	2001	2002	2003*
World	1,286	2,055	1,300	1,436	2,047	3,272	2,436	2,049*
China	467	497	357	329	451	571	467	628
Japan	171	226	175	148	207	1,065	133	92
S. Korea	18	70	130	212	273	227	370	435
Russia	70	525	56	48	36	56	47	112
Germany	59	33	24	32	53	91	148	63
Balance of Trade	-247	-854	-335	-544	-1,052	-2,225	-1162	-983

**Source:** S. Korean data from Republic of Korea, KOTRA (Korea Trade-Investment Agency) Overseas Offices. World Trade data from International Monetary Fund, *Direction of Trade Statistics*. Country data from World Trade Atlas. World sum is the total North Korean trade plus trade with South Korea. \*World Total for 2003 estimated by KOTRA.

<sup>30</sup> (South) Korea Trade-Investment Agency (KOTRA).

**Figure 3. DPRK Imports by Major Source  
1994-2002 (in percentage shares)**



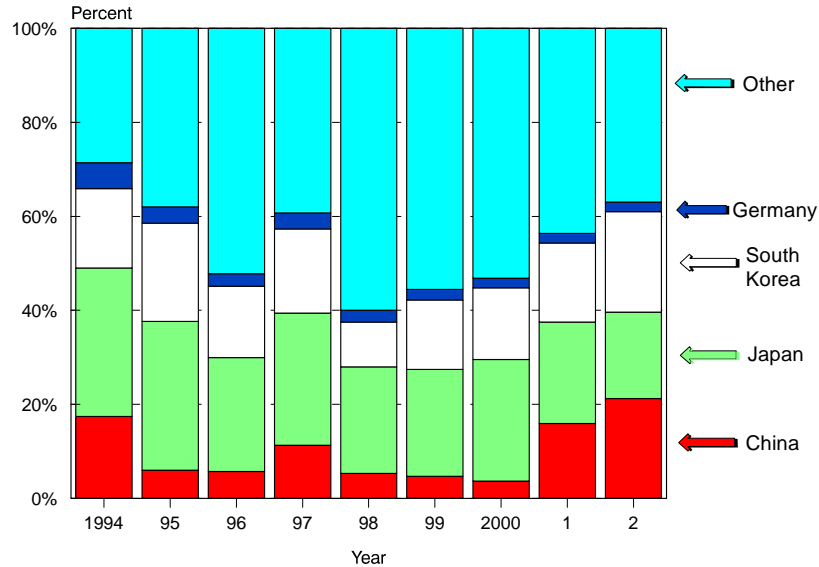
Source: Data from IMF, Direction of Trade Statistics, World Trade Atlas, & (South) Korean Trade-Investment Agency (KOTRA).

Major sources of imports for the DPRK have been China, South Korea, Japan, Thailand, India, and Russia. Despite current tensions over Pyongyang's nuclear program, imports appear to be growing, even though they are down from 2002. Fuel imports from China, and food imports from various countries account for most of the increases. Trade with Japan has been decreasing, while trade with South Korea has increased considerably.

Major export markets for the DPRK have been Japan and China with South Korea developing as a major market following the easing of relations. (See **Figure 4**.) 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. In 2003, exports to Japan declined — due in part to friction over the DPRK's admitted kidnappings of Japanese citizens. North Korea's major exports include animal products, textiles, machinery, electronic products, and base metals.



**Figure 4. DPRK Exports by Major Market  
1994-2002 (in percentage shares)**



Source: World Trade Atlas, IMF, *Direction of Trade Statistics*, and (South) Korean Trade and Investment Agency (KOTRA)

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. Some of this increased output is being sold abroad to generate foreign exchange to fund imports.<sup>31</sup>

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 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 \$1 billion annual merchandise trade deficit implies that Pyongyang must be generating that amount in foreign exchange through some means — either legal or illegal. Legal means include borrowing, foreign investments, foreign aid, remittances from overseas Koreans, 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,

<sup>31</sup> KOTRA. North Korea's Foreign Trade in 2001. Available at [<http://crm.kotra.or.kr>].

sales of illegal drugs, or by shipping illegal cargo between third countries. The country also can dip into their foreign exchange reserves.

## Legal Sources of Funds

North Korea is able to borrow on international capital markets. As of December 2003, the country had outstanding bank debt of \$246 million (up from \$167 million a year earlier). This is a relatively small amount, only \$11 per capita. Of the total, \$93 million had a maturity of one year or less, \$9 million matured in over two years, and the rest had maturity undisclosed. The debts are owed to banks in Germany (\$153 million — up from \$50 billion in 2002), Italy (\$28 million), France (\$8 million), Austria (\$5 million), and the United Kingdom (\$4 million). Total liabilities to foreign banks increased by \$79 million after declining by \$86 million in 2002, and rising by \$154 million in 2001 and by \$7 million in 2000.<sup>32</sup>

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 have 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.<sup>33</sup>

Although North Korea is not a major recipient of foreign direct investment (FDI), in 1997 FDI inflows totaled \$307.4 million. Inflows declined to \$30.7 million in 1998, -\$14.9 million in 1999, \$5 million in 2000, -\$24 million in 2001, and \$12 million in 2002. In 2002, the stock of FDI in North Korea totaled \$1,034 million.<sup>34</sup> North Korea's free trade zones, however, are attracting more foreign direct investment, but so far the actual inflows appear to have been fairly modest. South Korea's Hyundai Corporation, however, 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.<sup>35</sup>

A major source of funding for imports into the DPRK has been foreign aid or direct government transfers. Both developmental and humanitarian aid and assistance under KEDO (Korean Peninsula Energy Development Organization,

<sup>32</sup> Bank for International Settlements. *International Banking Statistics. Consolidated Foreign Claims of Reporting Banks on Individual Countries*, Tables 8 and 9. The data are locational (reported by the country of location of bank not nationality of the parent bank).

<sup>33</sup> Gittings, Danny. Kim Can't Kill the Free Market. *The Wall Street Journal (Brussels)*, May 30, 2003. P. A11.

<sup>34</sup> United Nations Conference on Trade and Development. *World Investment Report, 2003*. New York, United Nations, Annex Table B, pp. 251, 259.

<sup>35</sup> 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.

created under the 1994 Agreed Framework) 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 and organizations. As shown in **Table 2**, in 1999, the country received net ODA of \$201 million in 1999, \$75 million in 2000, \$119 million in 2001, and \$267 million in 2002. Over 2001-2002, the top donors of gross ODA were the United States (\$66 million), the European Commission (\$51 million), Germany (\$30 million), Arab Agencies (\$9 million), and the International Fund for Agricultural Development (\$6 million). South Korean aid to the North is not included in the ODA data.<sup>36</sup>

**Table 2. North Korea: Total Receipts and Official Development Assistance by Major Source/Donor, 1999-2002**  
(\$ in millions)

	Total Receipts Net				Total ODA Net			
	1999	2000	2001	2002	1999	2000	2001	2002
U.S.	146.3	1.6	0.3	131.2	146.3	1.6	0.3	131.2
Germany	-0.3	-2.4	34.1	35.0	2.9	1.5	27.0	33.2
France	0.7	28.4	12.8	-656.4	0.1	1.7	0.3	0.5
Australia	4.7	7.9	4.8	5.3	4.0	7.1	4.5	2.0
Norway	3.9	4.6	7.9	5.5	3.9	3.3	3.5	3.6
Sweden	4.4	3.5	3.4	4.3	4.4	3.5	3.4	4.3
Switz.	-5.8	2.6	6.1	3.4	2.0	2.6	4.5	3.4
EC + EU	-0.9	45.0	172.8	-565.5	25.4	34.6	78.0	108.4
Multilateral Agencies	35.6	48.3	68.1	78.1	35.6	48.3	67.2	77.1
<b>Total</b>	<b>156.7</b>	<b>39.9</b>	<b>190.9</b>	<b>-453.7</b>	<b>200.8</b>	<b>75.2</b>	<b>119.3</b>	<b>266.7</b>

**Source:** Organisation for Economic Cooperation and Development. *Source OECD, International Development Statistics*, on-line database.

**Note:** Data are from OECD members, multilateral agencies, and 12 other reporting nations not including South Korea, China, and Russia. Multilateral Agencies include the U.N., International Fund for Agricultural Development, Arab Agencies, and European Commission. EC + EU=European Commission plus European Union member nations. Total Receipts include ODA + Other Official Flows + Private Flows.

Since 2000, South Korean government assistance to North Korea has been running at around \$80 million (\$87.02 million in 2003). South Korean civilian

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<sup>36</sup> Organisation for Economic Cooperation and Development. *Aid and Debt Statistics* [<http://www1.oecd.org>].

organizations also provided \$71 million in assistance to North Korea in 2003.<sup>37</sup> The United States also provided aid to North Korea beyond what is considered to be official development assistance. Total U.S. assistance to the DPRK was \$287 million in 1999, \$139 million in 2000, \$178 million in 2001, and \$173 million in 2002 — much of it provided to the Korean Peninsula Energy Development Organization in exchange for North Korea's pledge to halt its existing nuclear program.<sup>38</sup>

The Organisation for Economic Cooperation and Development also compiles data on total financial flows to North Korea. These data include Official Development Assistance (foreign aid excluding that from South Korea) plus other official flows and private flows. As shown in **Table 2**, total net receipts by North Korea were \$157 million in 1999, \$40 million in 2000, and \$191 million in 2001, and a negative \$454 in 2002. The negative flow was caused by a net outflow (probably a loan repayment) of \$656 million to France. In recent years, North Korea's total receipts have been less than net ODA inflows because of loan repayments and other outflows

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.<sup>39</sup>

Another major source of income for certain North Korean families has been in remittances from overseas Koreans, particularly those who live in Japan.<sup>40</sup> 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, 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 send remittances to relatives or associates in North Korea. 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.<sup>41</sup>

Given the decade of stagnation of the Japanese economy and rising tensions between Japan and North Korea, these remittances have reportedly been declining.

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<sup>37</sup> Republic of Korea, Ministry of Unification. *Inter-Korean Relations on the Occasion of the 4<sup>th</sup> Anniversary of the June 15 Joint Declaration*. June 18, 2004. P. 9.

<sup>38</sup> CRS Report RS21834, *U.S. Assistance to North Korea: Fact Sheet*, by Mark E. Manyin.

<sup>39</sup> U.S. to Pay N. Korea for MIA Search. Associated Press. July 15, 2003.

<sup>40</sup> For details, see CRS Report RL32137, *North Korean Supporters in Japan: Issues for U.S. Policy*, by Emma Chanlett-Avery.

<sup>41</sup> Melons Used to Smuggle Cash to N Korea. Japan Today News (Online), January 1, 2003.

A 2003 Japanese newspaper report placed the amount at between \$200 million and \$600 million per year, but that figure could be exaggerated.<sup>42</sup> 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.<sup>43</sup> 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 ply between North Korea and Japan each year. Japan, however, has tightened inspections of North Korean ships.

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 a half billion dollars per year but can be offset by loan repayments. North Korea must finance the remainder of its trade deficit — which is approaching \$1 billion — by other means. It appears that these other means include exports of military equipment, counterfeiting currency, and trade in illegal substances.

## **Illegal or Questionable Sources of Funds**

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.<sup>44</sup> 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 North Korea is one example of such arms sales.<sup>45</sup> 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.<sup>46</sup>

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<sup>42</sup> Remittance Law Reinterpreted Cash Transfers to Pyongyang May Be Suspended as Deterrent. *The Daily Yomiuri* (Tokyo), May 19, 2003. P. 1.

<sup>43</sup> 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.

<sup>44</sup> Asano, Yoshiharu. N. Korea Missile Exports Earned 580 Mil. Dollars in '01. *Daily Yomiuri*, May 13, 2003.

<sup>45</sup> Solomon, Jay. U.S. Debates North Korean Exports, *Asian Wall Street Journal*, May 5, 2003. P. A1.

<sup>46</sup> 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.

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.<sup>47</sup>

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.<sup>48</sup> 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.<sup>49</sup> 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 2003 states that quantity of information and quality of many reports "give credence to allegations of state sponsorship of drug production and trafficking that can not be ignored. It appears doubtful that large quantities of illicit narcotics could be produced in and/or trafficked through North Korea without high-level party and/or government involvement, if not state support."<sup>50</sup>

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.<sup>51</sup>

Allegations also have been made that North Korea engages in counterfeiting operations, particularly of U.S. \$100 notes. It is believed that the country earns \$15 million to \$20 million per year in counterfeiting.<sup>52</sup>

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<sup>47</sup> 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.

<sup>48</sup> Paddock, Richard C. and Barbara Demick. N. Korea's Growing Drug Trade Seen in Botched Heroin Delivery, *Washington Post*, May 21, 2003.

<sup>49</sup> Kim, Ah-young, Halt North Korea's Drug Habit; a Narcotic State, *International Herald Tribune*, June 18, 2003. P. 8.

<sup>50</sup> U.S. Department of State. *International Narcotics Control Strategy Report*, 2003. May 2004.

<sup>51</sup> Struck, Doug. Heroin Trail Leads to North Korea. *Washington Post Foreign Service*, May 12, 2003. P. A01.

<sup>52</sup> Asano, Yoshiharu. N. Korea Missile Exports Earned 580 Mil. Dollars in '01. *Daily Yomiuri*, May 13, 2003.

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."<sup>53</sup>

## 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 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.<sup>54</sup>

The United States, moreover, maintains various economic sanctions on North Korea because it 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.<sup>55</sup> 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,<sup>56</sup> and service or repair of such items. Economic sanctions on North Korea, however, are essentially unilateral by the United States. Most other nations allow relatively free trade in non-sensitive goods with the DPRK.

The United States uses trade with North Korea as leverage and to send a message of disapproval for various activities by Pyongyang. Unless the political situation between North Korea and the United States is resolved, prospects for increased bilateral trade are dim. In addition to high tariffs and trade sanctions, the United States has blocked North Korea's admission to membership in international financial institutions (such as the World Bank, International Monetary Fund, and Asian Development Bank) which also would allow the DPRK to receive development assistance that would help finance additional imports from countries such as the United States.

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<sup>53</sup> Choe, Sang-Hun. N. Korea Sees Sanctions Amid Tough Times. Associated Press Online, June 12, 2003.

<sup>54</sup> See CRS Report 97-389, *Generalized System of Preferences*, by William H. Cooper.

<sup>55</sup> See CRS Report RL31696, *North Korea: Economic Sanctions*, by Dianne E. Rennack.

<sup>56</sup> [[http://w3.access.gpo.gov/bis/ear/ear\\_data.html](http://w3.access.gpo.gov/bis/ear/ear_data.html)]

**Table 3** shows U.S. trade with North Korea for 2003. Of the total U.S. exports of \$8.0 million, most was in food provided as aid. This was down from U.S. exports of \$25 million in 2002 — also mostly humanitarian and fuel aid. In FY2003, the United States provided North Korea 40,200 metric tons of food aid worth \$25.5 million.<sup>57</sup> Imports from North Korea are nil.

**Table 3. U.S. Trade by Commodity With the Democratic People's Republic of Korea (North Korea) in 2003**  
(\$ in thousands)

SITC Category	U.S. Exports	U.S. Imports	Balance
Dairy Products and Birds' Eggs	2,354	0	2,354
Fixed Vegetable Fats and Oils	2,000	0	2,000
Special Trans. & Commodities Not Classified According to Kind	1,369	0	1,369
Cereals and Cereal Preparations	1,178	0	1,178
Vegetables	804	0	804
Copper and Articles Thereof	133	0	133
Nuclear Reactors, Boilers, Machinery, and Parts	81	0	81
Meat	30	0	30
Optical, Photo, etc. Medical & Surgical Instruments	9	0	9
Aircraft, Spacecraft	6	0	6
Miscellaneous Manufactured Articles, n.e.s.	6	0	6
Books, Newspapers, Manuscripts	5	0	5
Other Base Metals, etc.	3	0	3
<b>Total</b>	<b>7,977</b>	<b>0</b>	<b>7,977</b>

**Source:** U.S. Department of Commerce Through World Trade Atlas.

**Note:** nes = not elsewhere specified.

**Table 4** 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 \$154,000 in 2000. Almost all of these imports were books and newspapers (\$125,000). The remainder was in art objects and antiques. U.S. exports 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

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<sup>57</sup> See CRS Report RL31785, *U.S. Assistance to North Korea: Issues and Options for U.S. Policy*, by Mark E. Manyin and Ryun Jun.



United States has been running a small annual surplus in its trade with North Korea, but the food aid has been provided without cost to North Korea.

According to the U.S. Department of Commerce, the United States has no direct investment in North Korea.<sup>58</sup> 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,<sup>59</sup> and some U.S. enterprises are working as subcontractors in the development of North Korea's Gaeseong industrial complex.<sup>60</sup>

**Table 4. U.S. Merchandise Exports, Imports, and Trade Balances with North Korea, 1990-2003**  
(\$ in thousands)

Year	U.S. Exports	U.S. Imports	Balance
1990	32	0	32
91	484	10	474
92	83	0	83
93	1,979	0	1,979
94	180	0	180
95	11,607	0	11,607
96	541	0	541
97	2,409	0	2,409
98	4,454	0	4,454
99	11,265	29	11,236
2000	2,737	154	2,583
01	650	26	624
02	25,012	15	24,997
03	7,977	0	7,977

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

<sup>58</sup> 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.

<sup>59</sup> Meeting with President of the American Chamber of Commerce and CRS analysts, April 7, 2003, Washington, DC.

<sup>60</sup> 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.<sup>61</sup> 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 a rapprochement with the North. Its strategy has been to use its economic leverage 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 was done with East and West 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 less of a potential siren song than the lure of cheap labor in China.

In 2003, total merchandise trade between the two Koreas reached \$724 million, more than double the \$333 million just four years earlier. The largest increases have been in South Korean exports (\$435 million in 2003), although imports also have risen (\$289 million in 2003). Much of the increase in exports has been in the form of food and industrial goods.

The major items purchased by South Korea from the North include food/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 current 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 processing done under contract) by North Koreans.<sup>62</sup> 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

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<sup>61</sup> The Six-Party talks are made up of representatives from the United States, Japan, North Korea, South Korea, Russia, and China.

<sup>62</sup> Speech by Minister Jeong Se-hyun on the 34<sup>th</sup> Anniversary of the Ministry of Unification. *Korean Unification Bulletin*, No. 53, March 2003.

largest project is 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.<sup>63</sup> 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 working to reconnect the Gyeongui (Seoul-Sinuiju) and Donghae (East Sea) railway lines and adjacent highways.

**Table 5. South Korean Merchandise Trade with North Korea  
1990-2003**  
(\$ 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	-152,300
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

**Sources:** South Korea Ministry of Unification, KOTRA.

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

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<sup>63</sup> 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 Issue Brief IB91141, *North Korea's Nuclear Weapons Program*, by Larry Nixsch. For the approval list, see KOTRA, Companies Approved for South-North Korean Economic Cooperation.

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.

## 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 state<sup>64</sup> and strives to maintain its influence in Pyongyang. China supplies North Korea with oil, food, and chemical fertilizers. The first destination of refugees from North Korea is usually northeastern China. Military cooperation between the two countries is extensive. In 1961, they signed a mutual defense pact. 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. China opposes economic sanctions on North Korea and holds veto power in the United Nations. In the spring of 2003, China cut off petroleum shipments for three days through a pipeline connecting the two countries. Although Beijing reported the incident was caused by a technical problem, it was widely interpreted as Beijing's response to Pyongyang's nuclear program in a region China prefers to remain non-nuclear<sup>65</sup> and a reminder to Pyongyang of its dependence on Beijing. China is hosting and facilitating the ongoing Six-Party Talks that seek a resolution to the North Korean nuclear problem.

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 claims to be in 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

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<sup>64</sup> Jiang Longfeng and Piao Yanhua. Status quo of and Prospects for Sino-North Korean Relations, *Changchun Dongbeiyu Yanjiu* (in Chinese), November 25, 2002, p. 21-28 (Translated by FBIS, Document CPP20030190000173).

<sup>65</sup> Jane's Information Group. Jane's Sentinel Security Assessment — China and Northeast Asia. External Affairs, October 27, 2003. David M. Lampton. China: Fed Up with North Korea?, *The Washington Post*, June 4, 2003. P. A27.

- 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.)<sup>66</sup>

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). 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.<sup>67</sup>

In November 2003, China reportedly transferred responsibility for securing its border with North Korea from the police to its army.<sup>68</sup> Many of China's two million ethnic Koreans live along this border, and it is a favorite crossing point for refugees from North Korea.

China's trade with the DPRK is small relative to its trade with South Korea. In 2003, China (excluding Hong Kong) imported \$395 million from North Korea while exporting \$628 million there. That placed the DPRK as 56<sup>th</sup> in China's ranking of countries both as a source of imports (less than from Equatorial Guinea or Romania) and destination of exports (less than to Algeria or Burma). 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.<sup>69</sup>

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<sup>66</sup> Jane's Information Group, *op. cit.*

<sup>67</sup> 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 D.C., February 12-13, 2004.

<sup>68</sup> Foley, James. China Steps Up Security on North Korean Border. *Jane's Intelligence Review*, November 1, 2003.

<sup>69</sup> Lee, Chang-hak. China's Trade with N.K. Via Dandong Exceeds US \$200 million. KOTRA, February 21, 2003.

**Table 6. China's Merchandise Trade with the DPRK  
1995-2003**  
(\$ 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	232.448

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

China's major imports from North Korea include fish and seafood; woven apparel; iron and steel; and miscellaneous grains, seed, and fruits. China's major exports to North Korea include mineral fuels and oil; cereals; electrical machinery; plastic; machinery; iron and steel; and miscellaneous grains, seed, and fruits.

## Japan-DPRK Economic Relations

Although Japan and North Korea have never established official diplomatic relations, the two nations have maintained significant economic ties for well over a decade.<sup>70</sup> Since the end of the Cold War and until recently, Japan was second only to China among North Korea's top trading partners. Bilateral trade has declined considerably since the 1980's, although this has been attributed primarily to the steep overall downturn of the North Korean economy as much as the state of bilateral relations. Japan plays a key role in resolving the current stalemate over North Korea's nuclear program because Tokyo can provide considerable economic assistance to the country and reportedly is ready to write Pyongyang a large check as compensation for its 50-year occupation once relations between the two countries are normalized. Japan also is the expressed target of North Korea's nuclear weapons

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<sup>70</sup> For more detailed analysis of Japan-North Korean relations, see CRS Report RL32428, *Japanese Prime Minister Koizumi's May 2004 Trip to North Korea: Implications for U.S. Objectives*, by Richard P. Cronin and CRS Report RL32161, *Japan-North Korea Relations: Selected Issues*, by Mark E. Manyin.

program,<sup>71</sup> and the two countries have struggled to resolve the issue of Japanese citizens kidnapped by North Korean agents in the 1970s and 1980s.

Although Japan is a major trading partner for the DPRK, the DPRK ranks 90<sup>th</sup> among the markets for Japan's exports (less than Slovenia or Kazakhstan) and 57<sup>th</sup> among sources of Japan's imports (less than Sri Lanka or Costa Rica). Seafood makes up almost half of the North's exports to Japan, followed by woven apparel, vegetables, and electrical machinery. Japan sends primarily vehicles, electrical machinery, animal hair/yarn and fabrics, and machinery to North Korea.

Japan's economic relations with North Korea extend beyond official trade. Japan has provided 766,000 metric tons of humanitarian food aid to North Korea, mostly through the United Nations World Food Program. The pattern of Japanese aid reflects developments in the political relationship between Tokyo and Pyongyang; shipments began in 1995 and 1996 when relations warmed and were suspended after the Taepodong missile launch over Japan in 1998 and the spy ship incident in 2001.

**Table 7. Japan's Merchandise Trade with the DPRK,  
1994-2003**  
(\$ 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

**Source:** Japanese data as supplied by World Trade Atlas.

A group of pro-Pyongyang ethnic Koreans living in Japan known as the Chosen Soren (Chongryun in Korean) has provided North Korea with additional funds in the form of cash remittances and, possibly, has facilitated illicit trade such as drug

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<sup>71</sup> Jane's Information Group. Armed Forces, Korea, North. Jane's Sentinel Security Assessment, March 4, 2003.

trafficking and counterfeiting.<sup>72</sup> Although the exact amount of remittances is unknown, the total appears to be in the neighborhood of \$100 million per year and has declined sharply since the economic boom times of the early 1990's.<sup>73</sup> A series of scandals involving ethnic Korean banks in Japan has revealed that money was illegally channeled to North Korea through the network of Chosen Soren-affiliated credit unions.

Recent developments have dampened political and economic relations between the two countries. Kim Jong Il's admission in fall 2002 that North Korea abducted several Japanese nationals and the announced advancement of the North's nuclear weapons program have hardened public sentiment and official policy towards Pyongyang. Tokyo has intensified its monitoring of Chosen Soren's activities in an effort to stem support to the Pyongyang regime, as well as imposing far more stringent inspections on sea links with North Korea. The Mangyongbong-92 passenger-cargo ferry, suspected of being used by North Korea for clandestine activities, suspended its regular service for seven months in 2003 due to Japan's suddenly strict inspection regime. From January-July 2003, visits by North Korean vessels to Japanese ports were down 25% from the year before.<sup>74</sup> In February 2004, Japan enacted legislation that allows the country to impose economic sanctions on North Korea without a UN Security Council resolution to that effect. In June 2004, the Diet passed a law that enables the country to ban port calls by ships deemed to pose a security threat.<sup>75</sup>

## 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 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.<sup>76</sup>

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<sup>72</sup> For more on the Chosen Soren, please see CRS Report RL32137, *North Korean Supporters in Japan: Issues for U.S. Policy*, by Emma Chanlett-Avery.

<sup>73</sup> Nicholas Eberstadt, "Financial Transfers from Japan to North Korea," *Asian Survey*, Vol. XXXVI, No. 5., May 1996; Marcus Noland, *Avoiding the Apocalypse* (Washington, DC: Institute for International Economics), P. 132.

<sup>74</sup> "Strict Ship Inspections Affecting Japan-N. Korea Trade," *Jiji Press English News Service*, September 11, 2003.

<sup>75</sup> Diet Enacts Laws to Augment War-Contingency Measures. *The Japan Times Online*, June 15, 2004.

<sup>76</sup> Lunev, Stanislav. New Era in Russian-North Korean Relations. *Newsmax.com*, August 23, 2000.



Recently, overall relations between Russia and North Korea have been improving. Russia is upgrading its railway connections with North Korea 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.

Still, the DPRK's trade with Russia lags behind what it has been in the past. In 2003, North Korea ranked 106<sup>th</sup> among Russia's sources of imports (below Jordan and Liechtenstein) and 65<sup>th</sup> in terms of markets for Russian exports (below Portugal and Lebanon). Russia, however, was North Korea's sixth largest trading partner.

Major Russian exports to the DPRK include mineral fuels, wood and pulp, fertilizers, ships/boats, and iron/steel. The large increase in 2003 came mostly in refined oil (total exports of mineral fuel oil jumped from \$20 million in 2002 to \$96 million in 2003). Pyongyang had to turn to Russia for petroleum, 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, tools/cutlery, and railroad equipment.

**Table 8. Russia's Merchandise Trade with the DPRK  
1994-2003**  
(\$ 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

Sources: Russian data as supplied by World Trade Atlas.

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

## U.S. Interests, Strategy, and Policy

The three legs of the grand strategy towards North Korea 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.<sup>77</sup> 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.<sup>78</sup>

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 curtail illegal and questionable activities by North Korea to include sales of missiles, illegal drugs, counterfeiting of currency, and proliferation of weapons of mass destruction, particularly to terrorist groups; (3) to reduce the threat of war on the Korean peninsula; (4) to curtail participation by North Korea in international terrorist activity to include harboring suspected terrorists; and (5) to induce economic, political, and societal change in the country that could bring about favorable changes in the Kim regime, governance, and attitudes toward the United States.

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 breaks international laws or treaties dealing with activities such as the non-proliferation of weapons of mass destruction, illicit drug trade, or counterfeiting of currency; (3) economic privation in North Korea mainly affects the population outside of Pyongyang and only

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<sup>77</sup> See CRS Report RS21473, *North Korean Ballistic Missile Threat to the United States*, by Andrew Feickert. 6 p.

<sup>78</sup> The White House. *The National Security Strategy of the United States of America*. September 2002. Available at [<http://www.whitehouse.gov/nsc/nss.pdf>].

indirectly affects the military and party leaders, (4) popular sentiment opposing the current regime is weak or suppressed sufficiently for Kim Jong-il to remain in power for an indefinite period of time, (5) any U.S. 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 currently is pursuing a policy of rapprochement 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 and Japan are major sources 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; and (6) economic reform and the opening of trade and investment in North Korea would likely induce large increases in production and economic well-being.

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, and (4) using the prospect of greater U.S. cooperation in combating militant Islam separatist groups in China and Russia to induce Beijing and Moscow to apply more pressure on Pyongyang to make suitable concessions in 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 plus sanctions (continue Six-Party talks, maintain sanctions, and continue or intensify the

Proliferation Security Initiative with its interdiction of illicit trade in weapons, drugs, counterfeit currency);

- intensify negative pressures on the DPRK (tighten economic 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.)

## **Current U.S. Policy**

Current U.S. policy with respect to the DPRK includes (1) diplomatic engagement through the Six-Party talks; (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; (6) keeping North Korea on the U.S. list of terrorist states, and (7) keeping North Korea from joining international financial institutions. The 1994 Framework Agreement to provide two light-water nuclear reactors and heavy fuel oil in exchange for North Korea's halt in its heavy-water nuclear generating plant and development of nuclear weapons is now on hold and, unlikely to be resurrected, according to many observers.

Although current U.S. policy is still a work in progress, it has not deterred North Korea from continuing its nuclear weapons program, has not visibly weakened the Kim regime, has not eased tensions in the Korean peninsula, and seems not to have induced greater regard by Pyongyang for human rights or democracy. It has, however, provided a mechanism for greater security cooperation in the region by compelling the five nations meeting with the DPRK in the Six-Party Talks to consult more extensively on security matters. Some have surmised that the lack of U.S. criticism of either Russian actions against militant Islamist separatists in Chechnya or China's actions against Islamic separatists in its Muslim Xinjiang Uighur Autonomous Region indicates that the United States has traded its vocal concern for human rights violations of the separatists for cooperation in resolving the North Korea problem and support for the global war on terrorism.

With respect to nuclear weapons, while the 1994 Framework Agreement was being observed, North Korea did close down its heavy water nuclear plant and allow the spent fuel rods to be sealed and inspected by the International Atomic Energy Agency (IAEA). However, it violated the Agreement (and another agreement to keep the Korean Peninsula nuclear free) by reportedly embarking on a separate program to enrich uranium. North Korea, subsequently, expelled the IAEA inspectors, withdrew from the Nuclear Non-Proliferation Agreement, and on October 2, 2003, claimed (so far unsubstantiated) that it had completed reprocessing 8,000

spent fuel rods and was using the plutonium to make nuclear bombs.<sup>79</sup> Pyongyang, however, has yet to test or deploy a nuclear weapon.

North Korea claims that the reasons for its nuclear program are to deter an attack by the United States and to use them if South Korea starts a war or to devastate Japan to prevent the United States from participating in such a war.<sup>80</sup> 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 its existence. Its fear of being attacked has been exacerbated by its inclusion in the “axis of evil,” the Bush doctrine of preemptive strikes, and the U.S.-led invasion of Iraq.<sup>81</sup> Some also consider Pyongyang’s nuclear program to be a bargaining chip to be traded for economic assistance and to gain international recognition.

Economic sanctions have brought few concrete results. The sanctions have primarily been American. North Korea continues to trade with other countries as well as to receive humanitarian food aid and limited foreign investment. Even the United States attempts to keep humanitarian aid separate from political considerations. The policy questions with respect to sanctions are whether economic sanctions have actually worsened economic conditions in North Korea and whether the poor economic conditions have changed policies in Pyongyang.

It appears that despite deep privation and negative growth during the mid-1990s, the sanctions seem to have 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.<sup>82</sup> 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.<sup>83</sup> Pyongyang has taken halting steps toward opening its 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.

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<sup>79</sup> James Brooke, “North Korea Says It Is Using Plutonium to Make A-Bombs,” *The New York Times*, October 2, 2003, p. A1.

<sup>80</sup> Jane’s Information Group. Armed Forces, Korea, North. Jane’s Sentinel Security Assessment, March 4, 2003.

<sup>81</sup> Laney, James T. and Jason T. Shaplen. “How to Deal With North Korea,” *Foreign Affairs*, March/April 2003. p. 20-21.

<sup>82</sup> BBC Monitoring, Asia Pacific. Former Bodyguard of North Korean Leader Interviewed, October 13, 2003, p. 1.

<sup>83</sup> 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 Sentinel Security Assessment*. June 10, 2003.

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 has passed its first anniversary and now has more than 60 governments participating. 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.<sup>84</sup>

With respect to North Korea and terrorism, the United States has kept North Korea on its list of terrorist states primarily because of past terrorist activity. The blowing up of an airliner with South Korean government officials on board and the harboring of Japanese Red Army members from the 1960s are the two primary reasons for keeping the DPRK on the terrorist list. The United States apparently has assured Japan that North Korea will remain on the terrorist list until it completely resolves the kidnapping issue with Japan. Being on this list requires the United States to impose certain trade restrictions.

## **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.

This report examines the major economic policy options that could be offered in the current negotiations. In the third round of talks (held in Beijing in June 2004), the negotiated package being considered reportedly includes a multi-nation security assurance plus economic assistance (particularly fuel aid) for the DPRK in exchange for a verifiable dismantling of or a halt to its nuclear program. (For discussion of the talks, see CRS Issue Brief IB98045, *Korea: U.S.-Korean Relations — Issues for Congress*, by Larry Nicksch.)

On June 23, 2004, the U.S. delegates at the Six-Party Talks in Beijing reportedly presented a practical series of steps to achieve the complete, verifiable and irreversible dismantlement (CVID) of North Korea's nuclear program. Under the proposal, the five nations would give North Korea energy aid and a security guarantee in exchange for ending its nuclear program (a detailed implementation plan of disabling, dismantlement, and elimination of all nuclear-related facilities and

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<sup>84</sup> 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.

materials, centrifuge and other nuclear parts, fissile material and fuel rods, and a long-term monitoring program). If North Korea agrees to the proposal, the United States is to take steps to ease North Korea's political and economic isolation. The U.S. proposal would give North Korea three months to prepare for the eventual comprehensive dismantling of its nuclear programs. During that time, Washington would allow other nations to supply the North with much needed fuel oil. The United States is also prepared to give diplomatic rewards, such as starting the process of lifting sanctions against Pyongyang. In exchange for its concessions, the United States wants North Korea to provide a full listing of its nuclear activities, allow monitoring of its atomic operations, and disable dangerous materials over the three-month period before actual dismantling begins. The United States itself would not provide any benefits short of an agreement for the complete, verifiable and irreversible dismantlement of the program. The United States did agree to replace the term, "CVID," which North Korea objects to, with a new term, "comprehensive denuclearization," but the new term reflects the CVID requirements. The term "nuclear freeze" is favored by North Korea, which is not prepared for complete dismantlement in the initial phase.<sup>85</sup>

Alternatively, some have opposed the Six-Party Talks and prefer that the United States pursue a hard-line policy toward North Korea — not make any concessions and even tighten economic sanctions — in the hope that the North Korean regime will collapse. Neither China nor South Korea, however, would welcome a collapse of the North Korean economy along with the subsequent refugee and other problems it would generate. As can be seen by the above review of DPRK international trade and other economic flows, an economic collapse seems unlikely as long as nations continue to provide trade opportunities and humanitarian assistance to North Korea.

**Table 9** 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. (Analysts contend that nuclear states tend to come in pairs — one new state will generate another. The existence of even a few nuclear weapons in Pyongyang will generate pressures for Japan and South Korea to follow.) 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, and Japan seek a stop to weapons proliferation, while also Japan seeks normalization of relations 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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<sup>85</sup> Pike, John. GlobalSecurity.org. DPRK, Nuclear Developments 2004. [http://www.globalsecurity.org/wmd/world/dprk/nuke2004.htm]

**Table 9. 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	Guarantee security and regime, economic aid
North Korea	Guarantee security and regime; establish diplomatic relations with the U.S. and Japan; reunification with South Korea on own terms	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	Economic support
Japan	Scrap nuclear weapons program and missiles; resolve abductions of Japanese citizens issue	Normalization, economic support
China	Non-nuclear Korean peninsula, non-proliferation; continued influence on peninsula	Economic support
Russia	Scrap N. Korean nuclear weapons; promote stability in N.E. Asia	Buffer diplomacy

**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. The Kim regime appears to be operating under the assumption that because of its designation as a member of the "axis of evil" by the Bush Administration, it has a high probability of being targeted for military action based on the Iraq precedent.

One policy package has been proposed by Michael O'Hanlon and Mike Mochizuki. Their "Grand Bargain," would require the DPRK to: (1) provide complete and verifiable denuclearization under International Atomic Energy Agency and Nuclear Non-Proliferation Treaty auspices; (2) end the development, production, deployment, and stockpiles of its medium- and long-range missiles; (3) reduce its conventional forces (by about 50%); (4) return Japanese kidnapping victims; (5) sign biological and chemical weapons conventions; (6) end counterfeiting and drug



trafficking activities, and (7) establish diplomatic ties with South Korea.<sup>86</sup> The United States would provide economic assistance. This combines positive and negative incentives that cover a range of interests on both sides. Other policy options include exercising a military option<sup>87</sup> as well as various combinations of deterrent, coercive, and co-optive measures.<sup>88</sup>

A risk of any policy package is that North Korea might not agree to scrap its nuclear program or agree and then cheat again. In that case, tensions would escalate, and options such as sabotage of the Yongbyon nuclear facility or a preemptive invasion could be considered.<sup>89</sup> Absent those extreme measures, the world may have to learn 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 is that the United States would be perceived as being blackmailed and giving too much away to a dictator who regularly violates the human rights of his people.

The costs of a diplomatic solution to tensions with North Korea would be relatively small compared with a nuclear arms race in Northeast Asia or a preemptive strike on North Korea by the United States. Because the United States, Japan, South Korea, and the European Union already have agreed to fund the provisions of the 1994 Agreed Framework, funds for fuel oil presumably would be made available. Opening trade and diplomatic relations would be of relatively low cost for the United States.

## Possible Economic Incentives

In addition to the security side of the Six-Party Talks, the negotiating package could include any of the following economic incentives. In the absence of an agreement under the talks, any of the following can be — and by some parties to the talks are being — pursued independently.

**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). 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

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<sup>86</sup> O'Hanlon, Michael and Mike Mochizuki, *Crisis on the Korean Peninsula*, McGraw-Hill, 2003, pp. 83-112.

<sup>87</sup> See CRS Report RL21582, *North Korean Crisis: Possible Military Options*, by Edward F. Brunner.

<sup>88</sup> See CRS Issue Brief IB91141, *North Korea's Nuclear Weapons Program*, by Larry Nicksch; Ted Galen Carpenter, Options for Dealing With North Korea, Foreign Policy Briefing No. 73, Cato Institute, January 6, 2003; or Watson Institute for International Studies, Brown University, North Korea and Nuclear Weapons - Policy Options, Choices for the 21st Century Education Program, 2003. Available at [<http://www.nautilus.org/DPRKbriefingbook/uspolicy/issue.html>]

<sup>89</sup> See OPLAN 5026 - Air Strikes. [<http://www.globalsecurity.org/military/ops/oplan-5026.htm>]

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.<sup>90</sup>

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. For the United States, if relations are not normalized, Washington can seek a solution similar to that with Cuba whereby in the absence of diplomatic ties, the U.S. mission 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.

Under the 1994 Agreed Framework, the United States and the DPRK announced their intention to open liaison offices in each other's capitals and establish full diplomatic relations if the two governments could make progress on issues of concern to each side. This was not completed.

**Negotiating a Trade Agreement.** The United States could begin talks with the DPRK on a trade agreement which 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.<sup>91</sup> 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

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<sup>90</sup> See CRS Report RL32161, *Japan-North Korea Relations: Selected Issues*, by Mark Manyin.

<sup>91</sup> 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.

number of world markets — in China, Japan, 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 precluded from doing so by U.S. law.

Conversely, the United States could take the issue to the United Nations and attempt to widen the sanctions. However, this would face a likely veto by China and Russia. Washington also could pressure Japan or South Korea to reduce economic ties to North Korea.

**Allowing the DPRK to Join International Financial Institutions.** The United States could stop blocking the DPRK from joining the major IFIs, particularly the Asian Development Bank, World Bank, and International Monetary Fund. 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 Asia 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 United States, Japan, and the DPRK could commence negotiations to remove the DPRK from the U.S. State Department's list of nations that support or sponsor international terrorism. Removal from the list would require Congressional concurrence. Once off this list, North Korea would become eligible for U.S. foreign aid, loans from the U.S. Export-Import Bank, loans from international financial organizations in which it has membership, and an easing of U.S. export control requirements. In order to be removed from this list, it appears that the DPRK would have to do the following: (1) issue a written guarantee that it no longer is engaged in terrorism; (2) provide evidence that it has not engaged in any terrorist act in the past year; (3) join international anti-terrorism agreements; and (4) address issues of past support of terrorism (particularly the harboring of Japanese Red Army terrorists and kidnapping of Japanese citizens).<sup>92</sup>

## Fuel and Food Aid

In the Six-Party Talks, since the DPRK appears to be most concerned with obtaining fuel and food aid in exchange for concessions on its nuclear program, the United States could provide assistance in any of a variety of forms. North Korea is insisting that the U.S. side provide fuel aid as part of any package settlement as evidence of the depth of their commitment. Under the 1994 Agreed Framework, the United States was committed to provide North Korea with 500,000 metric tons of heavy oil each year until the first of two light water reactors being built became operational. These oil shipments were terminated in 2002.

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<sup>92</sup> See CRS Issue Brief IB98045, *Korea: U.S.-Korean Relations — Issues for Congress*, by Larry A. Niksch.

## **Legislative Action**

Major congressional action with respect to security aspects of U.S.-DPRK relations is included in CRS Issue Brief IB91141, *North Korea's Nuclear Weapons Program*, by Larry A. Nicksch.