A Nuclear North Korea and Prospects for the Korean Economy: An International Business Perspective

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Introduction

In October 2006, North Korea (officially the Democratic People's Republic of Korea or DPRK in short) tested a nuclear bomb based on plutonium, thus proclaiming it to be a full member of the select nuclear bomb club. Whether the test was a resounding success or not is still not fully resolved, and the status of North Korea's uranium enrichment program is yet to be admitted by the DPRK government. Faced with strong international condemnation and a movement towards punitive sanctions coordinated by the United Nations, DPRK reached an agreement at the six party talks on February 13, 2007, under which DPRK eventually agreed to abandon its nuclear programs in return for aid. The accord implements a deal reached in September 2005, but the talks had stalled until early 2007. Paradoxically, a nuclear North Korea may lead to successful denuclearization of the Korean peninsula and robust economic developments there. As the DPRK regime feels confident enough in security terms now that it is recognized as a nuclear club member, it can enter into a "big deal" with its main opposing powers, the United States, Japan and South Korea, for swapping its nuclear weapons program for an iron-clad security guarantee and massive economic assistance for the modernization of the DPRK economy.

Under the February 2007 accord, all participating nations in the six party talks, including DPRK agreed to achieve the twin goals of denuclearization of the Korean peninsula and cooperation on economic, energy and humanitarian assistance to North Korea. On bilateral levels, both DPRK and the Untied States would work toward normalization of DPRK-U.S. relations, including the removal of the designation of North Korea as a state sponsor of terrorism and other sanctions, thus paving the way for

North Korea to join such international financial institutions (IFIs) as the IMF, the World Bank and the Asian Development Bank. Once admitted into these IFIs, North Korea can expect huge development assistance since the three IFIs in recent years have been eagerly looking for new borrowers of their assistance funds as traditional borrowers have either graduated from their former borrower status or have decided to prepay their existing loans from the IFIs and instead to start to tap vast international financial markets themselves. The accord also aims towards the normalization of DPRK-Japan relations, potentially unlocking billions of dollars in grants and aids from Japan similar to the case in the aftermath of Japan-South Korea normalization in 1965.

Of course, the full realization of the February 2007 accord already has encountered an early stumbling bloc over the prolonged dispute over $25 million of North Korean accounts frozen at Macao's Banco Delta Asia. The original timetable of the accord required DPRK to close down and seal its main nuclear reactor at Yongbyon under international inspection and provide a list of all its nuclear programs within 60 days. After a two-month delay, due to the frozen fund dispute, North Korea finally announced in late June that the fund dispute was resolved to its satisfaction and allowed the entry of International Atomic Energy Agency (IAEA) inspectors into DPRK to prepare for closing the Yongbyon facility. In return, South Korea is expected to ship 50,000 tons to DPRK in energy aid and the six party talks are to resume. Other nations in the talk are to meet at the foreign-minister level with DPRK to confirm implementation of the agreement and talk about security cooperation in northeast Asia. Beyond the 60-day time frame, DPRK is to provide a complete list of its nuclear programs and disable all existing nuclear facilities, while other nations are to grant DPRK 950,000 tons of energy aid.

It is clear that the final goal of complete denuclearization of the Korean peninsula will be critically connected to both massive economic aid and security guarantees for DPRK from the West. Without outside assistance, North Korea has no hope of achieving economic development and overcoming widespread economic hardship. Furthermore, North Korean denuclearization is important to the South Korean economy as well. Many foreign investors are understandably reluctant to commit their funds in South Korea as long as there is the specter of a North Korean nuclear threat. In late July 2005, for example, Fitch rating service pointed to the North Korean security issue as the most important reason not to upgrade South Korea's credit rating. Around the same time, Standard & Poor's decided to upgrade South Korean credit rating by a notch because of the resumption of the long-stalemated six-party talks.

The desperate state of the North Korean economy has been well documented and widely reported.[1] In rebuilding its economy, the country faces perhaps one of the biggest challenges in securing a vast amount of needed investment capital from abroad, especially in the critical area of infrastructure development and modernization. For example, poor infrastructure accounts for the unusually high transport costs in North Korea, where the cost of transporting a 20-foot container from Inchon in South Korea to Nampo in North Korea is four times higher than the cost of shipping the same container to China. Any meaningful economic development of North Korea requires huge sums of investment capital, especially the external capital in convertible foreign currencies in order to procure essential capital equipment and modern technology.

However, infrastructure development of North Korea can also contribute to closer economic cooperation among all Northeast Asian countries and more strengthened competitiveness of these countries in the world economy. For example, if the railway link between South and North Korea is successfully established to resurrect the Trans-Korean Railway (TKR), the two-way freight traffic between Japan and China can benefit from much lower transport costs than the existing sea or air transport modes. Similarly, if the TKR is connected to the Trans-Siberian Railway (TSR), both Korean and Japanese exporters to Europe will be able to reduce their transportation costs significantly, thereby enhancing their European trade competitiveness. At the same time, North Korea can earn substantial foreign exchanges from user fees on both Japanese and South Korean shippers for using its own railways in the TKR grid.

This article discusses the potential economic impacts of denuclearization of the Korean peninsula on both South and North Korea, especially from the perspective of international business as both North and South Koreas have to reach out to each other as well as to the global investment community to realize their full economic potential.

Current Economic Conditions of North Korea

North Korea has not always been an economic basket case as it is now widely recognized as being. During the Japanese occupation (1910-45), the northern part of Korea (roughly equivalent to today's North Korea) received most of manufacturing and industrial investments such as hydroelectric power plants and mines, while the southern part of Korea remained basically as a bread basket for Japan, given its abundant fertile farm lands. After the end of the Second World War in 1945 that led to the liberation of the Korean peninsula from Japanese rule, the North Korean economy grew faster than the South Korean economy until 1975, with the North Korean real economic growth rate of 14% per annum on average in the 1950s and 1960s. North Korea's level of per capita exports was higher than South Korea's until about 1970, and per capita income in North Korea was estimated to be higher than that of South Korea until early 1970s.

From the mid-1970s, the various structural constraints of a centralized Socialist economy retarded the North's economic dynamism, while the South Korean economy started to take off in the late 1960s with the export-led free market economy. The North Korean economy suffered further from the breakup of Soviet Union in 1991 and the subsequent withdrawal by Russia of economic assistance and China's demand from 1993 for a hard currency settlement for trade with North Korea. Massive floods in 1995-96 also exacerbated the poor North Korean economy.

For nine straight years from 1990 through 1998, North Korea experienced negative economic growth rates. Due in large part to the new Kim Dae-jung administration's sunshine policy and massive economic assistance from South Korea starting in 1999, the North Korean economy has been able to achieve positive growth rates from 1999 onward. The Korean National Statistical

Office data show the average growth rate of 2.7% between 1999 and 2004. Bank of Korea estimates that the North Korean economy achieved a real growth rate of 2.2% in 2004 with its GDP at $20.8 billion, compared to 1.8% in 2003. The North Korean GDP in 2004 was equivalent to about 3% that of South Korea, while its per capita income at $914 was about 1/16th that of South Korea in 2004. In 2006, the North Korean GDP at purchasing power parity (PPP) was estimated at $40 billion and a per capita GDP of $1,800 at PPP and a real economic growth rate of 1.8%, while the comparable figures for South Korea were estimated at $1,196 billion, $24,500, and 4.8%.[2]

Table 1: Real Economic Growth Rate of North Korea
(Unit: in %)

1990	1991	1992	1993	1994	1995	1996	1997	1998*
-3.7	-3.5	-6.0	-4.2	-2.1	-4.1	-3.6	-6.3	-1.1

1999	2000	2001	2002	2003	2004	2006
6.2	1.3	3.7	1.2	1.8	2.2	1.8

*1998: Inauguration of Kim Dae-jung administration with its sunshine policy and subsequent economic assistance, both covert and open, to North Korea.

Source*: North Korea Development Report 2003/04,* Korea Institute for International Economic Policy, Seoul, Korea, 2004, and U.S. Central Intelligence Agency, *The World Factbook,* 2007.

In recent years, the widespread shortage of energy and raw materials in North Korea has hampered the growth of the manufacturing, mining, electricity, gas, water, and government service sectors, which make up a large portion of the North Korean economy. Industrial capital stock is nearly beyond repair as a result of years of under-investment and shortages of spare parts. Due in part to severe summer flooding followed by dry weather conditions in the fall of 2006, North Korea suffered its 12th year of food shortages in 2006. Chronic food shortages in

DPRK are due to on-going systemic problems such as a lack of arable land, collective farming practices, and chronic shortages of tractors and fuel. Especially since the cut-off of the crude oil supply over North Korea's highly enriched uranium nuclear weapons program, the decline in industrial and other economic activities has been pronounced because of severe energy shortages. Thus, without resource inflows from abroad, especially from China and South Korea, the DPRK economy can hardly grow. North Korea does not have the capacity for capital formation on its own without outside assistance.

In the meantime, North Korea's Economic Reform was launched on July 1, 2002, which included the following measures:

- *Introduction of realistic price adjustments: average commodity prices were increased by 25 times and rice prices by 550 times.*
- *Public transport fares were increased by 20 times.*
- Wage levels were raised by 18 times on average.
- North Korean won was devalued from 2.15 to 150 per U.S. dollar. (Recent black market rate was estimated by the U.S. Central Intelligence Agency @2,500 to 3,000 won per dollar as of December 2006, and a recent paper by a Chinese scholar put the exchange rate estimate at 6,000 won per dollar.[3])
- Farmlands were de-collectivized and informal farmers markets allowed.
- Government subsidies were cut, and managerial decision-making was decentralized to the factory levels.
- Work units were allowed to sell surplus commodities on the civilian market.

However, the reform measures have largely failed to achieve the desired increase in the economic efficiency because of chronic shortages of materials and the deterioration of the conditions for foreign economic cooperation, given the North Korean nuclear crisis. If anything, the July 2002 reform measure led to hyper price inflation in many consumer goods. Since the implementation of the July 2002 economic reform, the amount of

DPRK-made goods sold domestically has actually shrunk, while imports from China have risen noticeably. Thus, the reform itself has not produced many positive effects on the supply side of the economy, but the marketization effect of the reform has made it easier for North Korea to trade with China and other countries.

However, the measures have served to raise the level of motivation in North Korean firms, workers, and citizens, invigorating the labor-intensive light industry and commercial distribution sectors. The partial and half-hearted attempt to move from a command economy to a monetary economy has also ushered in an era of complex markets and a monetization of the distribution system, replacing the rationing system. In an anecdotal report, the "taste of money" is believed to have penetrated the North Korean society. Now except for the grain coupon, all other coupons for daily necessities have been abolished and subsidies for enterprises have also been suspended. General markets have now been officially introduced throughout DPRK instead of agricultural markets. There are now a great number of small stores, convenience shops, food stalls, and private restaurants. The booming markets in DPRK have supplemented the supply of people's daily necessities, stimulated production, and promoted both internal and external trade. Earning money has become an important goal and the people show eagerness to work more and make more money, thus enhancing the economic mind of the people.

Table 2: Economic Comparison of North and South Korea (2006)

	North Korea	South Korea
Population:	23.3 million	49.0 million (2.1 times)
GDP (PPP):	$40 billion	$1,196 billion (30 times)
Per Capita GDP (PPP):	$1,800	$24,500 (14 times)
Foreign Trade:	$4.06 billion	$635.3 billion (159 times)

Source: U.S. Central Intelligence Agency, *The World Factbook,* 2007.

The July 2002 economic policy change was touted by a major North Korean official newspaper as "the biggest reform measures taken by the government since the land reform of 1946." [4] However, there are conflicting views and speculation among North Korean experts in the West over its true nature. First of all, there is controversy as to whether the reform measures have enough substance to bring fundamental changes to North Korea's rigid economic system. Some observers believe that the economic policy changes are substantial enough to signify the beginning of reform toward a market-oriented economy similar to that of China or Vietnam. Others view the reform measures not as replacement for the previous system but merely as a means for North Korea to strengthen its existing socialist economic system. In this view, the limited economic reforms that have been introduced so far are part of DPRK's survival strategy rather than a genuine economic development strategy. Nevertheless, North Korea's decision to introduce the incentive system, which is aimed at increasing economic productivity and output, raises some hope that its leadership may try to develop in DPRK a successful socialist market economy as well. Whether the reform measures could lead to an investment-friendly environment that can, like China, attract foreign direct investments from South Korea and other countries depends ultimately upon the resolution of the North Korean nuclear issue. Once that is successfully resolved, the most important next step for its economy is to strengthen the critically weak infrastructure. Here, the role of the international community including its immediate neighbors is paramount, given the scarcity of both capital and technical expertise in North Korea.

North Korean Economic Development and the Symbiotic Role of South Korea

Successful infrastructure development requires enormous sums of capital, especially foreign capital. There is a general agreement among experts that North Korea needs a large sum of investment capital to resurrect its battered economy. In conjunction with introducing limited economic reform measures and allowing the establishment of general markets in North Korea, the DPRK regime has attempted to open its economy in a series of actions, some more promising than others. In 1984, DPRK adopted a joint venture law in order to encourage foreign direct investment flows. In 1991, the Rajin-Sunbong Free Trade Zone was established as the country's first special economic zone (SEZ), similar to Chinese SEZs, but it failed largely because of its poor location in the country's economically remote northeastern corner. In 1998, South Korea's Hyundai Group, one of the largest and most successful Korean conglomerates, was allowed to launch the Mt. Kumkang tourism project, which has the potential to turn the Mt. Kumkang area into an SEZ.

The first successful summit meeting between North and South Korea in June 2000 seemed to open a new era of greater economic and security cooperation between the two countries. In its aftermath, both sides increased diplomatic, security and economic contacts with each other, promising a further opening of the North Korean economy. Chairman Kim Jong-Il's visits in 2001 to China (January) and Russia (July) appeared to accelerate the pace of the North Korean economic opening to its neighbors. In 2002, the DPRK government launched its economic reforms in July and established the second SEZ, the Shinuijoo Special Economic Zone on the busiest and most important port city just across China, after the earlier Rajin-Sunbong Free Trade Zone. However, the Chinese government was apparently not consulted in advance on this project, and the second DPRK SEZ project has apparently been put on ice since that time, mainly due to the Chinese hostility toward the SEZ project. In that same year, the Japanese prime minister made a surprise first visit in September to DPRK for a summit meeting with Chairman Kim Jong-Il encouraging many to expect an eventual diplomatic normalization between the two old enemies and a subsequent robust economic interchange between them, but progress so far has been minimal because of the Japanese abduction issue and rising tensions over North Korean missile tests and the DPRK nuclear weapons program.

While there have been many false starts and disappointments on the road toward economic reform, one bright spot has been the Gaesong Industrial Complex project (GIC). In 2004, DPRK agreed to establish GIC where business firms from South Korea and other countries could manufacture and process various

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products for South Korean and export markets with low-cost North Korean workers. Since GIC is located only 40 miles from downtown Seoul and 30 miles from the Incheon International Airport, it has a greater logistical advantage over the previous two SEZs. As of April 2007, 22 South Korean firms are commercially active at GIC, employing more than 13,000 North Korean workers and producing $13 million worth of products per month. Textiles account for 46%, followed by machinery (23%), electrical items and electronics (18%), and chemicals (13%). The master plan of GIC envisions developing almost 17,000 acres (20 million *pyong*) in three stages, with the first stage completed with 1 million *pyong*. In another auction of plant sites held in May 2007, GIC attracted applications from 344 South Korean firms bidding for one of the 140 sites.

Potentially, the North-South economic cooperation on the Korean peninsula can benefit both sides enormously. Numerous South Korean firms have moved their factory operations to neighboring countries such as China, Vietnam, the Philippines, and Indonesia, due to high labor costs, labor market rigidity and heavy government regulations. If North Korea opens up its frontier to welcome direct foreign investments from South Korea, many of these South Korean firms will probably switch their investments from China and South Asia to North Korea where the quality of labor is superior and logistic advantages are much greater. Combining the management know-how, capital, technology and international market connections of South Korean firms with North Korea's low-cost and efficient labor forces and logistical advantages could provide superior comparative advantages for both sides. Such a symbiotic economic relationship could usher in a second economic miracle for South Korea and promote a rapid modernization of the DPRK economy. However, such a large-scale economic cooperation between the two Koreas has to wait until a successful resolution of the North Korean nuclear issue.

Table 3: Growth of Inter-Korea Trade in Recent Years
(in $ millions)

2000	2001	2002	2003	2004	2005	2006
425	403	642	724	697	1,056	1,350

Source: National Statistical Office (2000-05 data) and Ministry of Unification (2006 data).

Intensifying DPRK – China Economic Relations

Since 2000, DPRK-China economic relations have intensified, as diplomatic relations between the two countries have improved, while those with Japan have exhibited the exact opposite trend. China has become the DPRK's biggest trade partner, accounting for over three quarters of the total DPRK's trade increase. While DPRK's overall trade volume during 2003-05 increased 5.8%, 19.5% and 5.1% respectively, its foreign trade with China increased 38.6%, 35.4% and 14.0%. In 2000, DPRK's foreign trade volume was composed of 23% with China, 22% with Japan and 21% with South Korea; comparable figures in 2005 were 39% with China, 26% with South Korea and only 5% with Japan. DPRK's exports to China are mostly primary goods, with mineral resources such as coal and iron ore increasing their share. Fishery products have been decreasing. Most important import items from China are composed of crude oil, food and machinery products, resulting in big trade deficits covered by loans and grants.

The other important trend in the DPRK-China economic relationship is the increased foreign direct investment (FDI) flows from China into North Korea. Both private and public capital from China has been flowing into North Korea, which has been actively promoting Chinese FDIs in DPRK. From the perspective of DPRK, Chinese FDIs are more dependable politically, as DPRK does not want to open up to South Korea on a large scale for political reasons. There are also wide economic complementarities, as China seeks new markets and new raw materials. Logistically as well, the Chinese government wants to promote the economic development of its relatively poor three Northeaster Regions of Liaoning, Jilin and Heilongjiang that are

close to North Korea to serve as their new market and new raw materials base. Thus, it is natural that Chinese FDIs have come from these regions into the DPRK as part of China's economic development strategy for these three regions. As there are large numbers of ethnic Koreans living in the Northeastern Regions, both sides have similar cultural and political backgrounds.

Cooperation with China in the Korean mining sector is a new, experimental field for North Korea, which has plenty of mineral resources such as coal, copper, iron ore, gold, and magnetite. Despite the fact that North Korea has plenty of eager and well-experienced mine workers willing to work at low wages, many DPRK mines are either operating below their full capacity or are at a complete standstill because of a lack of electricity and funding. Thus, the Chinese FDIs into the mining sector are particularly welcome to both DPRK and its mineworkers. The total volume of Chinese FDIs in DPRK amounted to $58.74 million during the first half of 2006, compared to $53.69 million during the entire year of 2005.[5] Apart from mining sector FDIs, the overall Chinese investments in DPRK appear not to be very robust, perhaps reflecting the poor investment climate and inadequate infrastructure in North Korea.

Potential Sources of Foreign Capital for North Korea

Broadly, we can think of four potential sources of external capital for North Korea, once the DPRK has embarked upon the path towards denuclearization under the six party framework: foreign governments, international financial institutions (IFIs), private international capital markets, and foreign direct investments (FDIs). These sources of funds can act singly or collaboratively in providing funds for North Korea. For example, both IFIs and bilateral donor sources of foreign governments can work together through international trust funds, as in the case of the Trust Fund for Gaza and the West Bank to support Palestine, where the funds came from IFIs such as the World Bank as well as from other donor countries directly. Similar arrangements have been made for financial assistance to Kosovo, East Timor, and Bosnia.

External development financing sources can vary among countries depending upon a country's, development stage, its external credit rating, and its degree of access to international financial markets. Among the four countries of Northeast Asia, Japan and China have been generally capital export countries in recent decades, given their huge current account surpluses accumulated over the years, resulting in the two largest foreign exchange reserves in the world. China has also enjoyed in recent years its status as the largest recipient of foreign direct investments among all the developing countries of the world, and it also has been highly active in tapping both international capital markets and IFIs for long-term development financing. South Korea has mainly relied upon international capital markets for long-term financing, even though foreign direct investments also played an increasingly important role after the 1997-98 financial crises. Like Japan, South Korea has graduated from the IFI financing, due to its high per capita income, except for the temporary reliance on IFIs in the immediate aftermath of the 1997 financial crisis. Still, such financing has been more for macroeconomic objectives rather than for financing development projects. North Korea, on the other hand, has been almost completely isolated from international financing sources until now, due to its hostile foreign policy and its nuclear weapons program.

Since the introduction of economic reform measures in 2002, North Korean enterprises have been actively seeking foreign investments. The country offers some attractive opportunities in the mining and mineral sectors and processing-on-commission trade. Once the nuclear issue is resolved satisfactorily, foreign investors are likely to be attracted if its low-wage, highly educated and motivated workforce is combined with an improving regulatory environment. As we have discussed already, Chinese FDIs have already started to flow into DPRK, as they benefit from the close political relations between the two countries. The next group of foreign investors even in greater numbers would be South Korean businesses, although any large inflow of investment capital from South Korea may have to wait for the resolution of the North Korean nuclear crisis.

Until the North Korean nuclear issue is fully resolved, it is difficult to envision large-scale international economic cooperation and assistance that will be crucial to the take-off of

the devastated North Korean economy. If the nuclear crisis grows worse, it may well become necessary for the international community to move in the opposite direction of economic sanctions as the only strategy short of the use of force to persuade North Korea to reverse its course. South Korea is now the North’s second-largest trading partner, following China, North Korea enjoys a large trade surplus vis-à-vis South Korea. Only with a satisfactory resolution of the North Korean nuclear issue and the subsequent normalization of diplomatic relations between North Korea and the United States, can inter-Korean economic cooperation flourish.

Table 4: Inter-Korean Economic Cooperation ($ million)

	2000	2001	2002	2003	2004	2005	2006
Inter-Korean trade volume	425	403	642	724	697	1,056	1,350
Government aid to North	79	70	84	87	115	124	194
Civilian aid to North	35	65	51	71	141	89	80
Number of visitors to North*	7,280	8,551	12,825	15,280	26,213	NA	NA

*Excluding tourists to Geumgangsan Mountain in North Korea.

Source: Rhee Bong-jo, “Inter-Korean Economic Cooperation: Current Status and Future Tasks,” *Korea Policy Review,* August 2005, and *KDI Review of the North Korean Economy*, May 2007.

IFIs are another potentially huge source of capital for North Korea, once the DPRK nuclear issue is satisfactorily resolved. Since the end of World War II, a number of IFIs have been established for the express purpose of providing external finance and technical assistance to developing countries such as the DPRK. The oldest and the most well known among them is the World Bank Group, which is composed of three operational agencies of the International Bank for Reconstruction and Development (IBRD), International Development Association (IDA) and International Finance Corporation (IFC). Along with the World Bank, the other twin IFI born in the 1944 Bretton Woods Conference is the International Monetary Fund (IMF). IBRD loans have maturities of 15 to 20 years in general at an interest rate of 6 to 7 percent, calculated on the basis of the annual weighted long-term borrowing costs of the World Bank's international bond issues plus a 0.5 percent margin. IDA credits have much longer maturities of 35 to 40 years and carry no interest except for annual service charges of 0.5 to 1 percent, and they are available to poorer developing countries, including North Korea. Both IBRD and IDA make about a quarter of their new commitments in infrastructure projects, including electricity and oil and gas, and about a fifth for human development projects of education, which is sort of soft infrastructure compared to the hard infrastructure projects such as transportation and power projects.

The IFC is the private sector assistance arm of the World Bank Group. While IBRD and IDA loans are extended to governments and government agencies of developing countries, the IFC makes loans as well as equity investments exclusively for private sector firms in developing countries without any government guarantees. Since private firms in North Korea are almost non-existent at present, IFC might be less relevant at this stage, but it can play a useful role later when foreign direct investments lead to the establishment of private business entities either as stand-alone companies or as joint venture firms in partnership with North Korean host organizations. The IMF has many lending facilities ranging, from five-year credit tranche loans to 10-year extended fund facilities and others. The IMF equivalent to IDA credits is the Poverty Reduction and Growth Facility (PRGF), available only to poorest developing countries such as DPRK as in the case of IDA credits.

The real problem, though, is that the normal financial assistance from the IMF and the World Bank Group is available only to member countries. The same is true of other regional IFIs such as the Asian Development Bank, the Inter-American Development Bank, the African Development Bank, and the European Bank for Reconstruction and Development. Unfortunately, North Korea is not a member of any IFI. In April 1997, North Korea made its first formal attempt to join an IFI by

officially applying for a membership in the Asian Development Bank (ADB). The ADB, headquartered in Manila, has the IDA credit equivalents known as Asian Development Fund (ADF) credits. ADF credits have a maturity of 35 to 40 years and carry no interest except for an annual service charge of 1 percent. Despite strong support for North Korean's membership application from China, South Korea and several other Asian developing countries, the two largest ADB shareholders, the United States and Japan, have been against admitting North Korea into ADB and their vetoes have stalled the North Korean application. North Korea continued to show its interest in the ADB membership, reminding the ADB board of its 1997 application in a formal letter in the summer of 2000.

Admission of North Korea into such IFIs as the ADB, the World Bank and the IMF is contingent in practical terms upon the agreement of both Japan and the United States. The U.S. government has withheld its agreement, primarily because of the fact that since 1988 North Korea has been on the U.S. government's list as one of the seven countries supporting international terrorism. Other countries on the list include Cuba, Iran, Sudan and Syria. Furthermore, North Korea is considered a violator of the missile technology control regime. U.S. government officials have hinted on various occasions that North Korea has to satisfy the United States on the terrorism issue, ballistic missile-related matters, and satisfactor0ily resolve its nuclear weapons program before Washington can support the North Korean membership into IFIs. Japan, on the other hand, wants a satisfactory conclusion of the case of the alleged North Korean abduction of Japanese citizens before it can consider supporting North Korean membership. Any membership into the World Bank has to be preceded by North Korea's being admitted into the IMF first. It is generally understood that North Korean membership into the IMF would be similarly opposed by the United States and Japan, thus effectively precluding North Korea from becoming a member of both the IMF and the World Bank.

Foreign governments from such countries as Japan and Russia, along with China and South Korea, can also be important sources of capital for DPRK, if the nuclear weapon issue is successfully resolved. A significant part of the savings in defense spending by South Korea can possibly be switched to economic aid to the DPRK. One prominent Korean watcher in the United States has estimated such defense savings at $2 billion a year.[6] An important foreign government aid source is Japan, assuming a satisfactory resolution of the Japanese abduction issue along with the DPRK nuclear weapons program. After the 1965 normalization of diplomatic relations between South Korea and Japan, the latter government provided South Korea $300 million in grants, $200 million in low-interest loans, and up to $300 million in commercial credits. While the exact amount of similar economic aid to the DPRK from Japan cannot be estimated in advance, as of 2000 when DPRK-Japan normalization talks were seriously considered, an estimate ranging from $4 billion to $20 billion was mentioned in various circles, with Japanese officials reportedly considering a $9 billion package.[7]

Conclusion

South Korea achieved the Miracle of Han River over the past three decades through aggressive industrialization and export-led economic growth strategy. North Koreans are equally energetic and hardworking as South Koreans. Many successful South Korean businessmen were originally from North Korea, testifying to the entrepreneurial spirit of many North Koreans. Once the North Korean nuclear issue is satisfactorily resolved and full diplomatic relations are established between North Korea and the United States as well as Japan, North Korea can join such IFIs as the World Bank and the Asian Development Bank, thus benefiting from the enormous capital and technical expertise of these IFIs. When North Korea starts to receive financial assistance from IFIs, multinational firms from South Korea and other Northeast Asian countries will not be far behind in committing massive capital into North Korea. It would not be difficult to envision another economic miracle on the Korean peninsula, the Miracle of Daedong River flowing through the North Korean capital city of Pyongyang, similar to the Miracle of Han River in South Korea.

In addition, Japan, China, Russia and South Korea could provide significant sums of both capital and expertise to promote the economic development of DPRK. Especially would the government and the private sectors of South Korea be most enthusiastic promoters of the DPRK economy, since both North and South Korean economies can benefit hugely from such a symbiotic relationship that can result from the successful denuclearization of the Korean peninsula.

Notes:

1 For example, Nicholas Eberstadt, *The North Korean Economy: Between Crisis and Catastrophe,* Transaction Publishers, 2007.

2 U.S. Central Agency, *The World Factbook,* 2007.

3 Liu Ming, "North Korean Economic Reform: an Uncertain Future for a Third-Way Exploration", in *Dynamic Forces on the Korean Peninsula: Strategic & Economic Implications,* Joint U.S.-Korea Academic Studies, Korea Economic Institute, Washington, 2007.

4 C*hosun Sinbo*, July 20, 2002.

5 *KDI Review of the North Korean Economy,* Korea Development Institute, May 2007, p. 17.

6 Nicholas Eberstadt, *op. cit.,* p. 255.

7 *Ibid*.