

Current Status of the Economy in the Democratic People's Republic of Korea

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Introduction

Regarding the current status of the economy in the Democratic People's Republic of Korea (henceforth referred to as the DPRK), owing to the absence of detailed statistical reports from the country itself, the situation is one of scarcity even for the basic economic indicators such as GDP and production totals by industry. Therefore data from the Republic of Korea (henceforth referred to as the ROK)—including the Bank of Korea's estimates for the GDP of the DPRK—are often quoted, yet within that data are many “constructed values” and it is not possible to use those values as absolutes.

In this paper, keeping in mind such constraints from the data, the author, together with giving an introduction to the appearance¹ of the DPRK as he has witnessed it in his eleven visits to the country since 1996, and utilizing recent statistical data and research results, would like to introduce the current state of the DPRK economy.

The Last Ten Years for the DPRK Economy as Personally Seen by the Author

The author's first visit to the DPRK was in the summer of 1996. For my first time in Pyongyang I had the impression “It's dark.” There was practically no street-lighting, and the lighting in the lobby and room of the hotel were darker in comparison to Japan. It was also a group tour, and there was the feeling that there was no variation to the food. Wherever we went within Pyongyang, the food served was the same. Perhaps as it was summer, the kimchi wasn't made from Chinese cabbage but from cabbage. The sole time I had roast duck I thought it was a great treat. As will be mentioned later, 1996 was the time the DPRK's economy was suffering the most hardship. As well as thinking that things had come to a pretty pass, I also experienced for myself on many occasions that that country too was a place where human beings lived.²

In September 2002, when I visited the DPRK two days after Prime Minister Koizumi's visit there, I had the opportunity to have a look at the contents of the packed lunches of Pyongyang residents who were enjoying the Mid-Autumn Festival in the city. White rice, beef, fish, *soju* (*shōchū*), beer—there were a variety of treats for a fine autumn day, and compared to the latter half of the 1990s, I sensed that the economy had got better.

Subsequently, I visited Rason in autumn 2003, and Pyongyang in summer 2004. At the time, I looked round the local markets (free market) in Rason, which abuts the Chinese and Russian borders, and in the capital Pyongyang, and I was surprised by the thriving scenes there and the great number of Chinese goods. In Rason, (though now closed) I visited a casino for foreigners (most of whom were Chinese) and I was able to witness the enthusiasm of the Chinese tourists.

In September 2005, I went from the airport into Pyongyang after ten in the evening, and it was refreshing that lights were shining from the windows of apartments which had hitherto been dark.

¹ Even though I actually witnessed this for myself, the areas which foreigners are able to visit are extremely limited. Therefore it goes without saying that one needs to be conscious of the constraint that one's own direct experiences may not be representative of the whole of the DPRK.

² For example, what I overheard North Koreans saying while out walking was completely different to what was transmitted on television and radio. A group of three young women sharing jokes while walking had an unexpectedly fashionable air.

In March 2006, here and there non-state-owned eateries³ had been established. That many of the customers were locals made quite an impression. In September of that same year I visited the Kaesong Industrial District (Gaeseong Industrial Complex) for the first time. Although the site was still being prepared, I was taken aback by the refined demeanor and the pronunciation approaching that of Seoul of the staff from the DPRK-side working in the Kaesong Industrial District Management Committee⁴.

When I visited the DPRK in March this year (2007), I noticed the bicycles that were swarming provincial cities and farming villages. There were many used Japanese bicycles, with “Miyata” and “Bridgestone” being popular, and the going rate for one was 50 US dollars. With ordinary workers’ monthly salary at a supposed 1–2 dollars in real terms, that a great volume of bicycles are circulating on the streets is a curious sight. This was also the same scene in Wonsan, which I visited at the end of July.

The author has visited the DPRK 11 times in the last 11 years, and through that process has been in step with the unfolding process of the DPRK’s economic recovery and of its economic reforms.

The Difficulties Stemming from the Collapse of the former-Soviet Union and Eastern Europe, and the “Arduous March”

After the Korean War, the DPRK industrialized through its own efforts. That it became heavily dependent on trade with and assistance from the socialist camp centered on the former-Soviet Union and Eastern Europe, however, is also a fact. It underwent the abrupt change of the loss of the socialist market and the economy was pitched into crisis. In addition, in 1995 and 1997 there was widespread disastrous flooding, and drought in 1996.

The DPRK, likening the period 1995–2000 to the most difficult time in the anti-Japanese struggle of the 1930s, uses the expression “Arduous March”. Government finances were more than halved in the four years from 1994 to 1998. In particular 1996–97 was tough. The ordering of the armed forces to economic construction even took place.

In the midst of an unprecedented economic crisis, the DPRK drastically reviewed its management of the economy—in other words it embarked on economic reform. Pak Jae-hun (2005, p. 30) takes 1998 as the turning point for the reconstruction of the economy. At that time, in the principles for economic management which appeared in joint editorials in the Korean Workers’ Party Organ newspaper and in its theoretical journal, “practical gain” in economic enterprises was stressed along with self-reliance. The restructuring of state-owned enterprises was pursued from 1999 to 2001, and in 1999 a national budget was issued for the first time in five years. In 1997 the DPRK economy found bottom, and from 1998 has been on the road to economic recovery. The scale of national government finances also found bottom in 1997 and has increased. Also total trade was at its lowest point in 1998 at 1.66 billion dollars, and recovered to 2.67 billion dollars in 2001 with the strengthening of economic ties with China and the ROK.

³ “Non-state-owned” here has the meaning of businesses specializing in “feeding and clothing society”, including eateries, that are under the management of other than state-controlled companies. The eateries which are a side-business for state-run trading companies and other places of business, when looked at from the aspect of the form of ownership, are no different from state-owned ones. The management objective of the eateries, however, is profit and supplementary income for the parent business and benefits for employees, and for eateries which have the pursuit of profit as their goal, the atmosphere is completely different to that for conventional eateries.

⁴ At the time, as well as getting a feeling of the power of influence of an environment where people who speak the same language work together, I got a sense that the DPRK had a reason to be highly sensitive about the influx of ROK culture.

DPRK-style Economic Reform and Economic Recovery

As mentioned earlier, the DPRK's economic reforms began in earnest in 1998. According to Masahiko Nakagawa (2005), "If you were to take the time the measures were adopted for broadly reorganizing the economic management system as the beginning of economic reform, then that could be said to have been the changes to the constitution of 5 September 1998. In the constitutional changes, the central and provincial political and administrative organs were streamlined, and at the same time the authority pertaining to the management of state-run enterprises was concentrated in the central organ for steering the economy."

In October 2001 Kim Jong-il gave a discourse on the improvement and strengthening of socialist economic management (see the November 2004 edition of "*Sekai*").⁵ That discourse touched on—in order to raise the incentive to work—not only positive incentives for highly-productive workers, but also the introduction of the negative incentive "If you don't work, you don't eat." The discourse, as well as mirroring reality in the form of a reflection of qualitative indices in the wage systems of factories and cooperative farms, led to the large-scale adjustment of wages and prices of 1 July 2002 (this was not the beginning of economic reform, but a step in the process of economic reform).

In June 2003 the "Farmers' Markets", which up to that point had allowed farmers to sell crops they produced themselves (these had actually turned to black-market trading, however, and manufactured goods were also on sale), were reorganized as "General Markets" (recently called "Local Markets") dealing in all kinds of consumer goods, and commercial transactions by individuals were permitted within the market. Although classed as economic subsidies from the state, price formation via the relationship of supply and demand was given the green light. On my visit in summer 2004, the middle-aged women sales staff were bashful,⁶ but in spring 2007 they were loudly and proudly calling out to customers. I sensed that "business" had lost its "shameful" tag. At the same time there has arisen change which could be called a "market economy from below" and an increase in the gap in incomes.

As mentioned earlier, people's wages are 1–2 dollars at the real rate of exchange. Of course, there exists a social policy of supporting the lives of the people via the sale of foodstuffs at prices fixed by the government. Many secondhand Japanese bicycles, which change hands for 50 dollars, however, can be seen in farming villages, provincial cities and in the suburbs of Pyongyang. In addition, there is even showroom space in Pyongyang with Japanese-manufactured electrical appliances selling for thousands of dollars. While there are people able to purchase such things, that there are also people whose every effort goes into meeting the daily necessities of life is the state of affairs in the DPRK today. It seems to me that the economic reforms will continue to be pursued, with these kinds of changes and disparities being taken on board at the same time.

Current Economic Policies

Currently, what shape are the DPRK economic policies assuming? Ri Gisong (2006) acknowledges that in the DPRK, there is room for improvement in the management of the socialist economy "as the history of socialism is short, and there is insufficient experience in economic management, the immature points of socialist economic management methods are

⁵ The discourse was not published in the DPRK itself, and the purported entire text was posted on the Web-site of the ROK's JoongAng Ilbo (Central Daily)

⁶ At the market on Tongil (Unification) Street in Pyongyang, the people working on the food and textiles stalls are mostly women. There are also men on the electrical, electronic and building material stalls, but there are a lot of women. The supervisory staff in the market are women. At a glance I would guess that the women are over 70% of the total.

many, and can't be seen as something completed". DPRK economic reforms, at the present time, are characterized by altering economic management to something which accords with reality, under the basic premise of upholding socialism, and trying to create material gain. For example, on the subject of management of state-owned enterprises, things such as the following have been suggested; making an "expansion, within a definite range, of the powers for the management of factories and businesses, within a framework of the planned economy and under the nation's unified leadership"; bringing into operation "in the area of distribution of the means of production, with the reality of the nation being unable to supply with great specificity all the raw materials and resources necessary for production and construction, an exchange of supplies wherein factories and businesses mutually circulate the means of production in to attempt to solve the problems troubling both parties"; and the "adoption of a series of economic measures such as establishing financial management systems focused on income".

As Jang Jin-u, (2007a) points out with "present a route emphasizing science and technology as a strategic route to the construction of a socialist, strong country, and along with an emphasis on thought and on the barrel of the gun, make an emphasis on science and technology one of the three main pillars for the construction of a powerful nation" and "information technology, nanotechnology and biotechnology", what is held to be necessary to effect economic recovery is an emphasis on science and technology, notably information technology, nanotechnology and biotechnology, and the practical use thereof for production. Regarding information technology, Ri Gum-hwa (2007) notes: "The DPRK, using information technology, is hastening the modernization of the earlier introduction of technology into the people's economy. In the entire economy, information technology devices are being introduced on a massive scale, and effort is being made for information technology equipment to substitute for human labor in all production processes and economic activities. In the general systems, such as product design, production, sales, and financial management, automation and modernization have been achieved". In the last few years, computers have been introduced on a large scale at every production site in the DPRK. Indeed in Pyongyang in 2007, in the concessions and shops in hotels and in eateries, stock control and accounts are done by computer.

Additionally, as Ri Haeng-ho (2007a) states that "The US has doggedly opposed the DPRK's long-proposed joining of the International Monetary Fund, the World Bank and the Asian Development Bank with the pretenses of 'nuclear weapons and missiles', 'abductions', 'sponsorship of terrorism' and 'human rights'.", the DPRK has indicated its intention to participate in the International Monetary Fund, the World Bank and the Asian Development Bank. As relations with the US improve, these wishes, which until the present have been mere postures for the DPRK, will have an increasingly high possibility of becoming reality.

In the joint editorial of three newspapers, the "Workers' News", the "Korean People's Army" and the "Youth Vanguard" published on 1 January 2007, with the policy of economic construction having been given top position starting in the 1990s and thereafter, the solution to the agriculture and food problem was given thus: "with agriculture being the foundation for the world, a groundbreaking advance must be brought about for the solution of the people's food problem." Then it called for the increased production of supplementary foodstuffs and daily essential items thus: "We must vigorously maintain the revolutionary flame of light industry and decisively raise the production of the people's consumer products." The conventional "Four Priority Sectors" of the electrical industry, the coal industry, the metal industry and rail transport were given as the important sectors for economic construction. For the details, please see Ri Yong-ok (2007) in this volume.

Macroeconomic Developments in the DPRK

I will give an overview of DPRK macroeconomics combining the Bank of Korea estimates and the

trade statistics of individual countries. Moreover, the Bank of Korea did not issue estimates relating to the DPRK economy for 2005. As the reason for this, it is reported that there is internal wrangling over the overestimating of the size of the DPRK economy, though there has been no formal announcement to that end. As can be understood by looking at the examples, the estimated data from the Bank of Korea, because they are artificially created numerical values used as estimates, are of use for looking at trends, yet for the absolute values of the population and gross national income (GNI) totals, and per capita GNI, etc., the figures are not that trustworthy, and are to be used with that understanding.⁷ Henceforth, if statistical data comes to be issued on a continuous basis from the public organs of the DPRK, needless to say that the use thereof is desirable, even if only in the sense of the accuracy of the data.

(1) The economy is on the upturn in the medium term, but the repercussions of the nuclear test can be seen.

According to the Bank of Korea estimates, the DPRK economy recorded negative growth for nine years in a row from 1990. Consequently per capita national income has been estimated to have fallen from 1,013 dollars in 1992 to 573 dollars in 1998. From 1999, however, this changed to positive growth, and to 2005 the growth in actual GDP for each year has been estimated as 6.2%, 1.3%, 3.7%, 1.2%, 1.8%, 2.2%, and 3.8%, respectively (see Table 1). This has been estimated, however, to have fallen back to negative growth of 1.1% in 2006. Because the DPRK's relations with the outside world have become tense, with the test-firing of missiles in July 2006 and the October nuclear test, a negative growth has been estimated.

Table 1. Bank of Korea GDP Estimates for the DPRK

	Unit	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Total population	Thousands	21,543	21,684	21,810	21,942	22,082	22,175	22,253	22,369	22,522	22,709	22,928	23,079
GDP (nominal)	100 million dollars	223	214	177	126	158	168	157	170	184	208	242	256
Per capita income	Dollars	1,034	989	811	573	714	757	706	762	818	914	1,056	1,108
Real growth in GDP	%	-4.1	-3.6	-6.3	-1.1	6.2	1.3	3.7	1.2	1.8	2.2	3.8	-1.1

Notes: The Bank of Korea revised the DPRK population estimates in 1999, and amended the time series for per capita national income for the DPRK in 1999 and 2005.

Source: Bank of Korea, *Results of Estimates of DPRK Economic Growth*, editions for each fiscal year (however, the Bank of Korea did not issue these kinds of figures in 2005)

From 1998 on the economy has been on an upturn, and in the area of agriculture the following can be noted; that there were successive good harvests from 1998 on, and that following the North–South presidential summit of June 2000, North–South relations changed for the better and the ROK began providing fertilizer; the construction of gravity-fed irrigation channels; the upgrading and putting in place of infrastructure geared to economic reality; and the adoption⁸ of measures focusing attention on agriculture. Particularly from 2005 on, with the fixing of a focus on the people's economic development of agriculture, a large-scale national investment and mobilization of the labor force has supported increases in production. In the area of industry, through the progress in economic reform, the following can be noted; that it became a possibility for the management of enterprises to match reality; the renewal of plant and equipment at factories where it had been delayed by the economic hardships, and the construction of medium-

⁷ For instance, for Masahiko Nakagawa (2005, p. 1) these kinds of estimates issued from the ROK are “the perceptions, turned into numbers, that the people who estimated the figures hold regarding the subject” and states “the results of analyses derived using the estimates ultimately end up as the perceptions of the people who estimated them. Therefore, if you don't use figures issued by the country itself in your analyses, you will be unable to get a grasp of the economic situation there.”

⁸ For more information please see Ri Haeng-ho (2007)

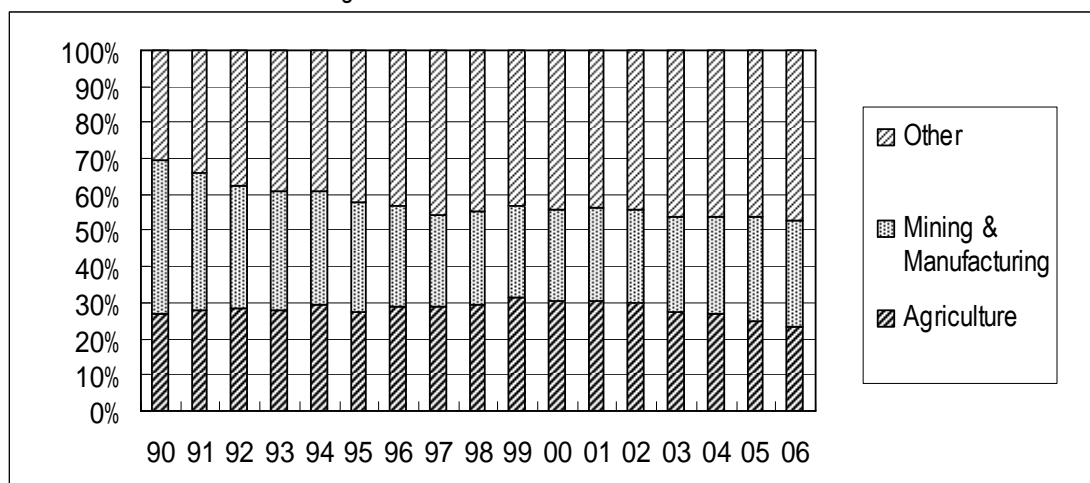
and large-sized hydroelectric power stations; and that the effectiveness of the upgrading and putting in place of infrastructure for production has increased. Additionally, there are shortfalls resulting from the expansion in North–South economic interchange and in international economic relations, and that the supply of energy and raw materials has increased, including imports, is conceivable.

(2) Changes in the industrial structure

According to the Bank of Korea estimates, the share of mining and manufacturing in total production fell dramatically in the 1990s with the fallout from the collapse of the Soviet Union and Eastern Europe, and dropped 17 percentage points from 42.8% in 1990 to 25.5% in 1997. From 1997 it increased slowly and reached 29.6% in 2006. Agriculture’s share of total production from 1990 to 2006 inclusive has moved between 23.3% and 31.4%. The volume of crops produced has increased, and particularly within the last few years, in spite of the implementation of an agricultural promotion policy, agricultural production’s relative position is continuing to slip in the Bank of Korea estimates.

Looking at the estimated results, the DPRK economy from 1997 on didn’t undergo rapid economic growth, yet mining and manufacturing, which has traditionally occupied a large share of the whole, has been increasing little by little. For agriculture, crop production is continuing to increase, but its relative ranking is continuing to fall. This is because the growth of sectors such as construction and services has outpaced that for agriculture. It would be right to consider that the appearance of estimation results of this kind is because the DPRK economy has started on its recovery.⁹

Figure 1. Industrial Structure based on GDP



Source: Compiled by ERINA using the Bank of Korea *GDP Estimates for the DPRK*, editions for each year

(3) Government finances

The Supreme People’s Assembly (parliament) of the DPRK restarted the issuing of indices for government finances in 1998, and from 1999, annual expenditure, albeit small, has shown an increase on previous years. The absolute figures for the budget and the settlement of accounts came to be issued once again from the Third Plenary Session of the Eleventh Supreme People’s

⁹ The DPRK is intrinsically an industrial nation, and currently, in spite of efforts in food production within the country from the international environment around the Korean Peninsula, it is thought that in the future, as with Japan and the ROK, the DPRK will move in the direction of obtaining foreign currency through the industrial and service sectors and importing any shortfall in food.

Assembly held on 11 April 2005.¹⁰ According to these figures the annual expenditure for 2006 was 401,768,820,000 won, as in Table 2. If one looks at the breakdown for the actually implemented budget, defense expenditure stood at 16% and state economic expenditure at 40.8%. The annual revenue for 2006 was 405,755,550,000 won, 3,986,730,000 won in the black.

Table 2. Totals for DPRK National Finances

(Units: 10,000 DPRK won, %)

Year	Revenue	Year on year	Expenditure	Year on year	Balance
2004 (Actual)	33,754,600	101.6	34,880,700	107.8	-1,126,100
2005 (Estimated)	38,857,100	115.1	38,857,100	111.4	0
2005 (Actual)	39,167,957	100.8	40,566,812	104.4	-1,398,855
2006 (Estimated)	41,615,954	107.1	40,217,099	103.5	1,398,855
2006 (Actual)	40,575,555	103.6	40,176,882	99.0	398,673
2007 (Estimated)	44,071,295	105.9	41,544,263	103.3	2,527,032

Notes: As of August 2007 the official parity rate was 1 dollar to 139 won, and the market rate 1 dollar to 2,860 won.

Sources: Actual figures for 2004 and estimated figures for 2005 are from the table on page 37 of "Economic Reform and the Conquest of Famine in the DPRK" by Moon Ho-il, *Structural Change and Population Change in the Northeast Asian Region* (Akashi Shoten, 2006).

Actual figures for 2005 and onwards calculated by ERINA based on a variety of reports.

(4) Food

The DPRK, from the second half of the 1990s on, in order to solve the food problem, has measures for improvements in the agricultural sector, including; the promotion of planting crops suitable for the soil, planting crops suitable for the time of year, double-cropping, soybean- and potato-cultivation; the introduction of superior varieties; and the improvement of irrigation equipment. Since 2005, in particular, they have promoted the raising of agricultural production as a national issue.

According to the estimates of the ROK Rural Development Administration, the crop production for the DPRK in 2006 was estimated at 4.48 million tons. The production volume has decreased from the previous year, from the flood damage which occurred in summer 2006.

Table 3. Fiscal Year 2006 DPRK Crop Production Estimates

	All	Rice	Corn	Cereals	Legumes	Misc. grains	Tubers
Area planted (1,000 ha)	1610	586	526	137	135	25	201
Quantity (kg / 10 a)	-	323	333	153	114	74	314
2006 production volume (10,000 tons)	448	189	175	21	16	2	45
2005 production volume (10,000 tons)	454	202	163	23	17	2	47

Source: ROK Rural Development Administration data

(http://www.rda.go.kr/user.tdf?a=user.board.BoardApp&c=2002&board_id=rda_issue&seq=1053)

Trade and Investment

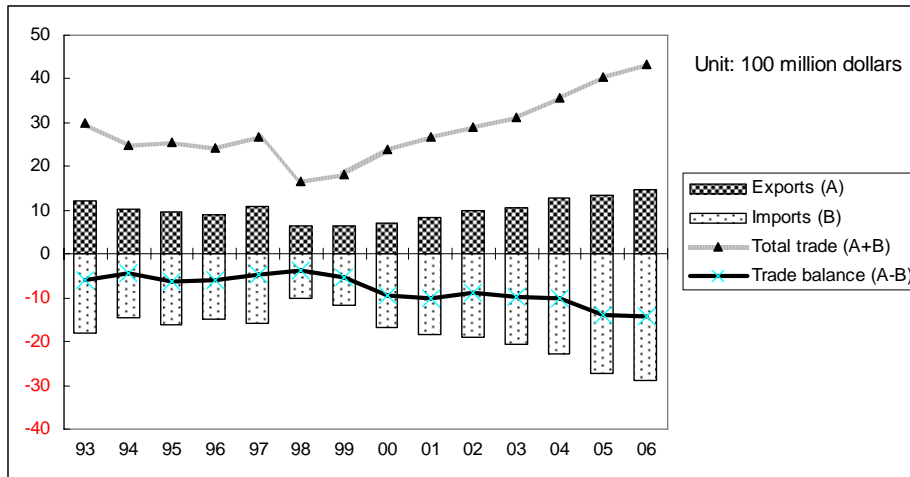
(1) Changes in the volume of trade

From 1999 with its increasing upward trend, total trade (including North–South trade) as well as GDP increased year on year, and reached 4.35 billion dollars in 2006 (an increase of 7.1% on the previous year). A complete recovery, however, has not been achieved, and is at a level of

¹⁰ Though announced in the report of the Supreme People's Assembly in relative values, afterward the absolute figures were reported on Korean Central Television news.

over eighty percent of the peak (5.24 billion dollars in 1988). Exports in 2006 were 1.47 billion dollars (an increase of 9.54% on the previous year) and imports 2.88 billion dollars (an increase of 5.90% on the previous year). The balance of trade was 1.41 billion dollars in the red. The trade balance has been permanently in the red since the establishment of the DPRK.

Figure 2. Changes in Trade and Trade Balance (including North–South trade)

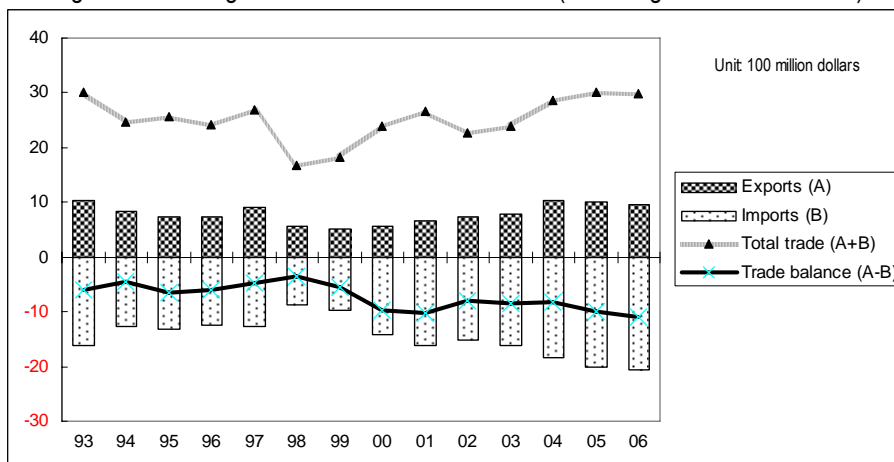


Note: As trade bound for the ROK is not included in the external trade totals for the DPRK from the KOTRA estimates, the addition of the amounts for DPRK–ROK trade from the ROK Ministry of Unification compiled figures was carried out at ERINA.

Sources: Compiled from Korea Trade-Investment Promotion Agency (KOTRA), *Trends in the DPRK's External Trade*, editions for each year, and from the ROK Ministry of Unification, *Monthly North–South Trade Cooperation Trends*.

On the other hand, taking away the North–South trade, and looking at the genuine trade total, as in Figure 3, this increased from 1998 to 2001, decreased once in 2002, increased from 2003 to 2005, and in 2006 has declined by -0.2% . Looking at these developments we see that external trade has been influenced via the changes in international relations, and, as will be mentioned below, that the increase in the share of North–South trade in the DPRK economy has been continually growing.

Figure 3. Changes in Trade and Trade Balance (excluding North–South trade)



Sources: Compiled from Korea Trade-Investment Promotion Agency (KOTRA), *Trends in the DPRK's External Trade*, editions for each year, and from the ROK Ministry of Unification, *Monthly North–South Trade Cooperation Trends*.

(2) Exports

For the exports in 2006 the main commodities were minerals (coal, ores, etc.), non-ferrous metals, garments, machinery and electrical and electronic equipment, and chemicals and plastics. After 2000 exports increased, and in animal products (mainly seafood) which had continuously been the largest export up to 2004, decreased greatly due to the fall in prices in the Chinese market and Japan's economic sanctions. As a result, taking a look at external trade alone with North–South trade removed, the exports for 2005 and 2006 decreased.

Mineral exports (ores, etc.) increased almost three-fold in 2004 compared to the previous year, and greatly increased in 2005 as well. In 2006 there was practically the same amount of exports compared to the previous year. Exports of non-ferrous metals fell approximately 30% compared to the previous year. Exports of chemicals and plastics have increased though this is considered to be due to the growing contract manufacturing trade in plastics.

(3) Imports

Imports—minerals from China (oil, etc.), machinery and electrical and electronic equipment, chemicals, and plastics, etc.—have increased, and imports of textile fibers and non-ferrous metals are comparatively large. As a result of the rise in world oil prices, a situation has been observed in the last few years of the growth in the monetary base being greater than the growth in the volume of oil imported. The increases in the imports of machinery and electrical and electronic equipment are due to the increase in the investments in the restructuring and modernization of the main domestic industries and in investment from China, etc. The increase in the imports of textile fibers, from the fact of the increasing exports of textile fibers, demonstrates the intensification of contract manufacturing.

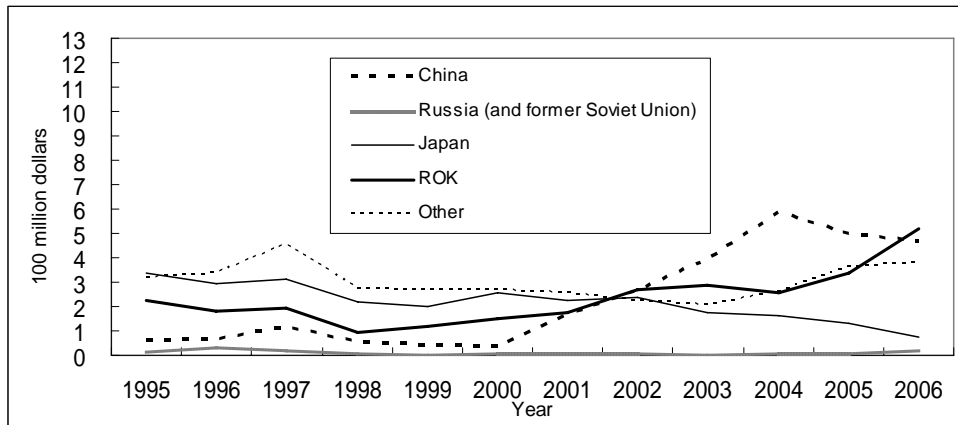
From 2000 the imports of fibers and electronics components, and the imports of machinery, such as industrial machinery, mining machinery, and precision machinery for use as producer goods in contract manufacturing, have increased sharply. The increase in imports of such items shows that the DPRK economy is on the road to recovery.

(4) Trading partners

Regarding the DPRK's trading partners, from 1993 on the four Northeast Asian countries of China, Japan, the ROK and Russia have accounted for over 60% of trade (in 2006, 74.0% of exports, 79.8% of imports, and 77.8% overall), and trade disproportionately dependent on specific countries has continued. Recently, however, new major trading partners have emerged, such as Thailand. Additionally, the DPRK is highly dependent on the ROK, with which it has no diplomatic relations, in the area of trade.

Surveying the situation from 2001 to 2006, the share held by trade with China is large, but from 2004 in particular its growth has been rapid. The amount of trade with the ROK has been increasing annually, surpassing the amount of Japan's trade in 2002 to give it third place. Recently Thailand has emerged as a trading partner, and in 2004 it overtook Japan, becoming the DPRK's third largest trading partner. In 2005 Russia's trade overtook that of Japan, taking fourth place and pushing Japan into fifth.

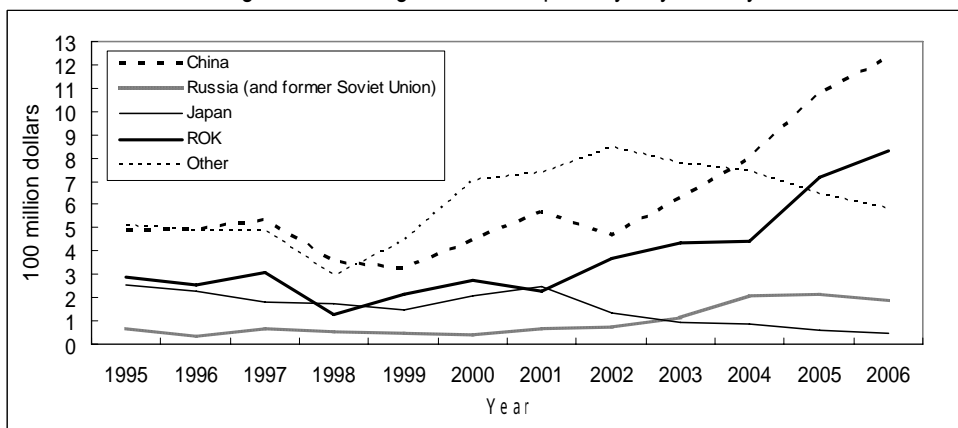
Figure 4. Changes in Total Exports by Key Country



Note: As trade bound for the ROK is not included in the external trade totals for the DPRK from the KOTRA estimates, the addition of separate DPRK–ROK trade amounts was carried out at ERINA.

Sources: Compiled from Korea Trade-Investment Promotion Agency (KOTRA), *Trends in the DPRK's External Trade*, editions for each year, and from the ROK Ministry of Unification, *Monthly North–South Trade Cooperation Trends*.

Figure 5. Changes in Total Imports by Key Country



Note: As trade bound for the ROK is not included in the external trade totals for the DPRK from the KOTRA estimates, the addition of separate DPRK–ROK trade amounts was carried out at ERINA.

Sources: Compiled from Korea Trade-Investment Promotion Agency (KOTRA), *Trends in the DPRK's External Trade*, editions for each year, and from the ROK Ministry of Unification, *Monthly North–South Trade Cooperation Trends*.

The Current Status of North–South Economic Interchange and Cooperation

(1) The current status of North–South trade

Since the North–South presidential summit of 15 June 2000, great changes have been achieved, from the relationship centered on the private sector in North–South economic relations to the commencement of operations of enterprises via agreement between the two governments. In the ROK, North–South economic relations are conducted on the principle of them being “not relations between nations, but internal dealings of one people.” Therefore the matters relating to North–South dealings are treated in a form different to that for foreign trade.

For the statistics on North–South economic relations, as shown in Table 4, a term for trade meaning “commercial transactions” is used for one category lumping general trade, contract manufacturing trade and the like together with assistance. The ROK’s statistics for this “North–South commercial interchange” were issued, and in addition to general trade, included the export of materials to be used in the Kaesong Industrial District and the Kumgangsan tourism

project, as well as both private and government assistance. North–South dealings, as they differ from international trade, are not listed in trade statistics. The statistics, in reasonably finely-itemized breakdown, appear instead in periodicals of the ROK Ministry of Unification.

If we take a look at the figures for 2006, commercial dealings make up approximately 69% of total North–South trade, and non-commercial dealings, being assistance in the main, make up approximately 31%. Commercial dealings include general trade and contract manufacturing trade, as well as economic cooperation projects (Kaesong Industrial District and tours to Mount Kumgang.) Non-commercial dealings include social and cultural cooperation projects, and the Korean Peninsula Energy Development Organization (KEDO).¹¹ For 2006, the combined non-commercial dealings occupied a share in North–South trade of approximately 31%.

Table 4. Summary of 2006 North–South Trade by Type

Unit: 1,000 US dollars

Major division	Intermediate division	Minor division	Jan-Dec 2006				
			Exports	Imports	Total	Ratio	
Commercial Transactions	Trade	General trade	22,178 (6.3)	281,952 (49.2)	304,130 (44.9)	22.53%	
		Contract manufacturing trade	93,571 (19.1)	159,387 (21.4)	252,958 (20.6)	18.74%	
		Subtotal	115,750 (16.4)	441,339 (37.8)	557,089 (32.7)	41.27%	
	Economic cooperation projects	Kaesong Industrial District project	222,853 (41.9)	75,943 (283.6)	298,796 (69.0)	22.14%	
		Mount Kumgang tourism project	56,568 (-34.9)	86 (72.0)	56,654 (-34.9)	4.20%	
		Other economic cooperation projects	14,511 (133.9)	1,019 (3187.0)	15,530 (149.1)	1.15%	
		Subtotal	293,932 (17.4)	77,048 (287.6)	370,980 (37.3)	27.49%	
	Total			409,682 (17.2)	518,387 (52.4)	928,069 (34.5)	68.76%
	Non-Commercial Transactions	Assistance to the North	Private assistance	407,528 (67.9)	32 (-23.8)	407,560 (67.8)	30.20%
			Government assistance	11,696 (-90.4)	0 (-100.0)	11,696 (-90.4)	0.87%
Subtotal			419,224 (14.8)	32 (-46.6)	419,256 (14.8)	31.06%	
Social and cultural cooperation projects		Social and cultural cooperation projects	1,294 (124.2)	1,120 (449.0)	2,414 (209.0)	0.18%	
Light-water reactor project		Light-water reactor construction	0 (-100.0)	0 (0.0)	0 (-100.0)	0.00%	
		KEDO heavy fuel oil	0 (0.0)	0 (0.0)	0 (0.0)	-	
		Subtotal	0 (-100.0)	0 (0.0)	0 (-100.0)	0.00%	
Total			420,518 (14.9)	1,152 (334.7)	421,670 (15.1)	31.24%	
Grand total			830,200 (16.0)	519,539 (52.6)	1,349,739 (27.8)	100.00%	

Note: Values in brackets show the increase/decrease on the previous year

Sources: Korea International Trade Association, 2007.

Rates calculated by the author.

a) *General trade*

What kinds of things, then, are being traded in general trade?

First let's have a look at the situation for the equivalent of exports out of the ROK.

¹¹ As can be seen in Table 4 the figures are zero for the KEDO project as it is currently not in operation.

Table 5. The Top Five Commodities Exported in General Trade—January to December 2006

Units: 1,000 US dollars, %

Rank	Commodity	Value	Rate of increase	Proportion of total
1	Copper coil electrical wire	3,265	76.2	14.7
2	Transformer components	2,357	9.0	10.6
3	Machinery	1,829	237.4	8.2
4	Shipping vessels	1,809	65.9	8.2
5	Light fuel oil	1,445	507.1	6.5
	Total	10,705		48.2

Notes: Commodities are by six-digit HS code, with the rates of increase compared with the previous year

Source: Table, p. 7, Korea International Trade Association, 2007

Table 5 shows the top five commodities exported (“transported out”) in 2006. According to the Korea International Trade Association (2007a) the top-two ranked items are regarded as materials for Japanese traders to participate in the contract manufacturing in the DPRK. The Japanese traders’ raw materials, for use in contract manufacturing, occupy the top-spots for exports within North–South trade, for the reason that within all exports the share of general trade amounts to only 3% of the total.¹² That is, the goods that will be able to be sold in general trade from the ROK to the DPRK will be limited.

Next let’s have a look at the situation for the equivalent of imports into the ROK.

Table 6 shows the top ten commodities imported (“brought in”) in 2006. Zinc and other nonferrous minerals, seafood and agricultural products made up just under 90% of the total. For the exports in general trade from the DPRK to the ROK there has arisen a commodity structure with an overemphasis on such primary commodities.¹³

Table 6. The Top Ten Commodities Imported in General Trade—January to December 2006

Units: 1,000 US dollars, %

Rank	Commodity	Value	Rate of increase	Proportion of total
1	Zinc ingots	81,264	93.9	28.8
2	Nonferrous minerals	54,672	133.1	19.4
3	Shellfish (Mollusca)	35,127	12.7	12.5
4	Dried seafood	16,901	-3.6	6.0
5	Processed seafood	14,998	67.4	5.3
6	Mollusks	12,445	6.9	4.4
7	Shiitake mushrooms	10,711	42.0	3.8
8	Wasabi	7,797	41.4	2.8
9	Octopus	7,747	42.1	2.7
10	Shrimp	4,462	137.2	1.6
	Total	246,124		87.3

Notes: Commodities are by six-digit HS code, with the rates of increase compared with the previous year

Source: Table, p. 8, Korea International Trade Association, 2007

b) *Contract manufacturing trade*

In 2006 contract manufacturing trade made up approximately 19% of North–South trade. As

¹² Please refer to the table and graph of “Content Analysis of Exports”, p. 7, Korea International Trade Association (2007a)

¹³ This indicates that, for the economic development of the DPRK, the following are necessary; from this time on processing such primary products and increasing the added value, and, pending the normalization of the economy, attracting labor-intensive industry epitomized by the contract manufacturing trade.

exports were 93.57 million dollars and imports 159.38 million dollars, simply put this makes the added value from manufacturing within the DPRK some 50 million dollars.¹⁴

Table 7. The Top Ten Commodities Imported in Contract Manufacturing Trade—January to December 2006

Units: 1,000 US dollars, %

Rank	Commodity	Value	Rate of increase	Proportion of total
1	Sports clothes	34,371	2.4	21.6
2	Men's trousers	25,035	43.4	15.7
3	Coats and jackets	19,494	6.4	12.2
4	Men's suit-jackets	18,856	39.0	11.8
5	Women's trousers and skirts	9,441	7.1	5.9
6	CRT TVs (digital)	5,714	56.5	3.6
7	Blouses	4,807	96.4	3.0
8	Undershirts	4,794	103.3	3.0
9	Underwear / Indoor wear	4,124	32.5	2.6
10	Women's suit-jackets	3,417	13.3	2.1
Total		130,053		81.5

Notes: Commodities are by six-digit HS code, with the rates of increase compared with the previous year

Source: Table, p. 9, Korea International Trade Association, 2007

Table 7 shows the top ten commodities imported in contract manufacturing trade in 2006. Looking at the commodities we can see that almost all are for textile-product manufacture. It can be clearly seen that the contract manufacturing from the ROK to the DPRK (excluding Kaesong Industrial District) is concentrated in textile products.

c) *Kaesong Industrial District (Gaeseong Industrial Complex)*

Next, the ROK is pushing forward with construction inside the DPRK, so let's take a look at the course of developments at the Kaesong Industrial District (Gaeseong Industrial Complex).

Tables 8 and 9 show the top ten commodities exported and imported, respectively, in connection with Kaesong Industrial District enterprises in 2006. Taking a look at these, it can be seen that the movement in and out of the materials necessary for the construction of the industrial district itself and the factories make up a large proportion within the trade statistics relating to the Kaesong Industrial District. For the exported commodities, the materials necessary for production are only in fourth and fifth position, and for the remainder, the commodities—which equate to investment in the body of the industrial district and the factories are the more numerous.¹⁵ Additionally, there is a distinct repeated export and import of the same commodities, such as steel construction components and equipment for construction.¹⁶ Looking at the commodities imported,

¹⁴ It doesn't follow that the difference in exports and imports will yield simply the DPRK's foreign currency earnings because there have also been imports of raw materials and equipment for manufacturing from third countries such as China, but it is certain that it has become a considerable income.

¹⁵ Imports and exports of commodities other than raw materials and processed products are large, but this is—with Kaesong Industrial District being in the process of construction—for the reason that the exports and imports of the equipment and materials for the construction of the industrial district and the materials and equipment for the construction of the factories (putting it correctly, investment) are large.

¹⁶ Piecing together what concerned parties have said from the ROK government, the Korea International Trade Association and the Export-Import Bank of Korea, both the import and export of temporary scaffolding, etc.—to be used in the construction of factories—are clocked for the steel structural components and equipment for construction in Tables 8 and 9. For the construction of the Kaesong Industrial District the project is being carried out almost entirely via imports from the ROK, and it appears that the import and export statistics are inflated above and beyond the actual materiel present in the Kaesong Industrial District, as imports and exports

it can be seen that finished goods produced in the Kaesong Industrial District are the more often listed, in places 2, 4, 5, 6, 8, 9 and 10. Compared to contract manufacturing trade, where textile products are numerous, the production in the Kaesong Industrial District is distinguished by its including many industrial products such as machine components.¹⁷

Table 8. The Top Ten Commodities Exported to Kaesong Industrial District Enterprises—
January to December 2006

Units: 1,000 US dollars, %

Rank	Commodity	Value	Rate of increase	Proportion of total
1	Steel structural components	50,719	102.5	22.8
2	Light fuel oil	12,396	17.2	5.6
3	Connecting parts	9,002	932.3	4.0
4	Wristwatches	8,581	550.5	3.9
5	Parts of shoes	7,564	372.7	3.4
6	Iron reinforcing bars	5,984	50.7	2.7
7	Equipment for construction	5,110	-50.9	2.3
8	Hand tools	4,753	-41.3	2.1
9	Sewing machines	4,048	233.9	1.8
10	Anthracite coal	4,044	242.4	1.8
	Total	112,201		50.4

Notes: Commodities are by six-digit HS code, with the rates of increase compared with the previous year

Source: Table, p. 10, Korea International Trade Association, 2007

Table 9. The Top Ten Commodities Imported from Kaesong Industrial District Enterprises—
January to December 2006

Units: 1,000 US dollars, %

Rank	Commodity	Value	Rate of increase	Proportion of total
1	Steel structural components	25,867	3986.4	34.1
2	Parts of shoes	8,580	445.8	11.3
3	Equipment for construction	5,803	217.7	7.6
4	Plastic goods	3,592	185.3	4.7
5	Wristwatches	1,638	357.5	2.2
6	Electrical cables	1,613	9388.2	2.1
7	Other hand tools	1,398	8.2	1.8
8	Automobile components	1,256	1720.2	1.7
9	Refrigerator components	1,033	522.2	1.4
10	Shoes	988	-	1.3
	Total	51,768		68.2

Notes: Commodities are by six-digit HS code, with the rates of increase compared with the previous year

Source: Table, p. 11, Korea International Trade Association, 2007

are repeated every time the plant supply—including the repair of trucks and heavy machinery and the rental of temporary materials—comes and goes between the Kaesong Industrial District and the ROK. (The Kaesong Industrial District is no more than 70km from Seoul, and it would be no exaggeration to say that it is, to all intents and purposes, a suburb of Seoul.)

¹⁷ For the machine components produced in the Kaesong Industrial District, components which require working by hand, and items produced via labor-intensive production are large in number. It is thought that for the items in places 6, 8 and 9 in Table 9, many are the products of enterprises that produce wiring harnesses. At the time the author looked round one of the enterprises in question, it was explained by the person in charge of visits to the enterprise that the assembly process for wiring harnesses cannot be automated and that they are all manufactured by hand—and indeed workers from the DPRK were assembling and inspecting products by hand at the production line.

Regarding the import-export associated with the Kaesong Industrial District, the large import-export volume of materials and equipment relating to construction has greatly inflated the monetary amounts in the statistics, as the initial phase of site development and construction and the building of factories is currently ongoing. This is something that results from the unique character of the Kaesong Industrial District, having the Korea Land Corporation in charge of all aspects of the provision of infrastructure.¹⁸ This situation will probably continue until 2008 or 2009 when the first stage is completed with, at the least, the offering for sale of lots for the initial phase.

d) *Assistance to the North*

Making up most of the non-commercial dealings is assistance to the North. This is literally aid. The amount of assistance makes up approximately 31% of the total North–South trade.

Table 10. The Top Ten Commodities Exported under Private Assistance—January to December 2006

Units: 1,000 US dollars, %

Rank	Commodity	Value	Rate of increase	Proportion of total
1	Rice	187,545	93672.5	46.0
2	Phosphatic fertilizer	59,172	320.3	14.5
3	Mixed fertilizer	47,595	-56.2	11.7
4	Nitrogenous fertilizer	21,434	0.7	5.3
5	Pharmaceutical products	11,720	36.8	2.9
6	Portland cement	7,858	21137.8	1.9
7	Equipment for construction	7,625	4577.9	1.9
8	Undershirts	5,470	-50.3	1.3
9	Trucks	3,353	227.4	0.8
10	Wheat flour	2,953	175.9	0.7
Total		354,725		87.0

Notes: Commodities are by six-digit HS code, with the rates of increase compared with the previous year

Source: Table, p. 12, Korea International Trade Association, 2007

Table 11. The Top Five Commodities Exported under Governmental Assistance—January to December 2006

Units: 1,000 US dollars, %

Rank	Commodity	Value	Rate of increase	Proportion of total
1	Petroleum products	3,819	-	32.7
2	Parts for construction equipment	2,044	269.6	17.5
3	Portland cement	1,491	-46.0	12.7
4	Coating materials	553	9116.6	4.7
5	Aluminum pipes	360	380.0	3.1
Total		8,267		70.7

Notes: Commodities are by six-digit HS code, with the rates of increase compared with the previous year

Source: Table, p. 13, Korea International Trade Association, 2007

The share of private assistance within the amount of assistance as a whole was approximately 97% for 2006, and governmental assistance was less than 3%. Tables 10 and 11 show the top

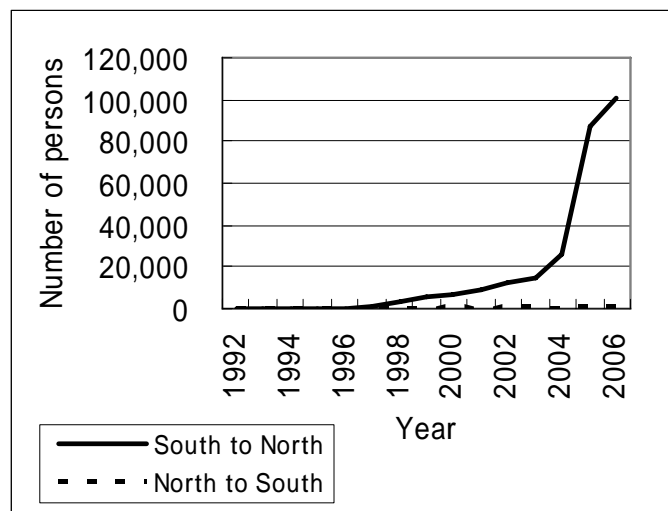
¹⁸ In the main, for export-oriented industrial complexes, it is the general case that the countries concerned carry out the provision of infrastructure. In the case of the DPRK, because of a chronic shortage of foreign capital, the current situation, commencing with the Rason Economic and Trade Zone opened in 1993, is that the provision of infrastructure in special economic zones is entrusted to the investor.

ten commodities exported under private assistance, and the top five commodities exported under governmental assistance, respectively, in 2006, and it can be seen that the aid that has been carried out in rice and fertilizer, agreed between the ROK and DPRK governments, has been classified as private assistance. This is because the situation is one arising from a loan agreement in which the Export-Import Bank of Korea (ROK) and the Foreign Trade Bank of the DPRK have become contracting parties, and these kinds of aid are formally not grant aid.¹⁹ As a result, what is called governmental assistance has come to be greatly limited to such things as the securing of the means of transportation for rice and fertilizer aid.²⁰

(2) Increase in North–South personal exchanges

North–South personal exchanges have increased, receiving a boost from the North–South interchange since the North–South presidential summit of June 2000, and in 2006 broke the 100,000-person barrier. In particular, it has been characterized by the enormous growth since the getting under way of production in the Kaesong Industrial District in 2005. It is also characterized by the fact that North–South traffic is mostly of visitors from the ROK to the DPRK, and that from the DPRK to the ROK the numbers are miniscule.²¹ With the rapid increase in the number of people crossing from the South to the North, and in particular the increase in crossings to the Kaesong Industrial District, the governments of the ROK and DPRK are putting various measures in place between them, including a simplification of the procedures for crossing the border.

Figure 6. Movement of People between North and South (excluding Kungangsan Tourist Region)



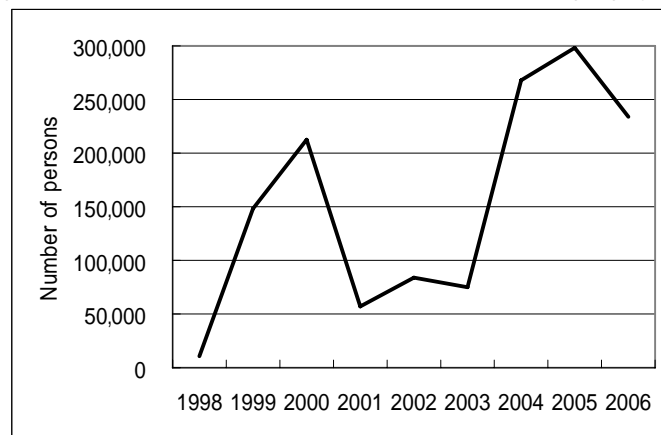
Sources: 1998–2004 from the graph on p. 109, *2005 Unification White Paper*
2005–2006 from the ROK Ministry of Unification Web site

¹⁹ Not only rice and fertilizer, the materials necessary for the reconnecting of the Gyeongui and Donghae railway lines have also been provided in a similar fashion in the form of loans. The conditions for general loans are ones such as a 10-year deferment of payments, repayment over the remaining 20-year period, and an interest rate of 1% per annum. Whether the loans will actually be repaid is often questioned in the ROK National Assembly.

²⁰ With such loan-types we couldn't call the provision of rice and fertilizer genuine private assistance. This is because, having been set by agreement reached through dialogue between the ROK and DPRK governments, the provision of such assistance is also paid for from the public funds of the Inter-Korean Cooperation Fund.

²¹ 2005 saw a record high of 1,313 persons for the number of people crossing from the North to the South. In the human interchange between the ROK and the DPRK, however, the proportion made up by people crossing from the DPRK to the ROK was, after 2000, 8.8% in the year it reached its maximum, and in the last few years has been around 1%.

Figure 7. Number of Participants in Tours to Mount Kumgang by Year



Sources: 1998–2004 from the graph on p. 109, *2005 Unification White Paper*
2005–2006 from the ROK Ministry of Unification Web site

Figure 7 shows the number of participants in tours to Mount Kumgang. With the opening of the road running parallel to the Donghae railway line on the East Sea coast, and overland tourism becoming possible from autumn 2003, tourism to Mount Kumgang has greatly increased from 2004 on.

In 2006, with the tense situation which accompanied the nuclear test, and the halting of government subsidies for such things as “learning by doing”, numerous in the winter, tourism decreased by around 20% on the previous year.

(3) Kaesong Industrial District (Gaeseong Industrial Complex)

Within the 1,000,000 *pyong* (3.285 km²) initial phase of the Kaesong Industrial District, a pilot project (model complex) has been completed for 28,000 *pyong* with 15 enterprises moved in, all of which are in operation.

For the initial phase of the actual complex the preparation of the site was completed at the end of May 2006, and for the facilities within the complex—such as roads, water and sewage, and green areas, etc.—construction work is progressing, with an aim of completion in May 2007. As of the end of December 2006, the proportion of construction that was underway was 86%.

Within the initial phase of the actual complex, offering for sale of lots has been carried out for 50,000 *pyong* (170,000 m²). As of the end of December 2006, three firms have commenced operations (at the trial operation stage), and nine firms are in the process of plant construction.

In June 2006 there were 7,871 workers from the DPRK-side in the Kaesong Industrial District—then in September 2006, 8,879; in January 2007, 11,342; and in July, 15,958 (of which 13,330 were factory workers, 487 were ancillary and administrative personnel, and 2,141 were construction workers). In addition the cumulative total production of the industrial complex has also grown rapidly: 42.30 million dollars in June 2006; 82.25 million dollars in September 2006; and 100.81 million dollars in January 2007.²²

For the Kaesong Industrial District the primary contractor is currently the Korea Land Corporation, a company linked to the ROK government. For the Hyundai Asan Corporation, which originally started the project, the arrangement is now one of carrying out the construction of the

²² In the future, once the offering for sale of lots in the initial phase has got into full swing, the number of people working in the Kaesong Industrial District is predicted to reach 100,000. That would mean that workers would also have to be brought in from areas other than Kaesong City (which has a population of approximately 300,000). Moreover, buses are in operation to ensure a means of commuter transport for the current 10,000 plus workers, but ensuring trouble-free commutes even in the current situation is proving a headache.

industrial complex, after receiving a commission as builders from the Korea Land Corporation.

As observed above, North–South relations have developed rapidly following the North–South presidential summit of June 2000. From the relations previous to that, centered on the private North–South trade, projects have been increasing which necessitate intergovernmental dialogue, such as the reconnection of North–South railway lines and roads and the establishment of direct North–South air routes and shipping routes, tourism to Mount Kumgang and the construction of the Kaesong Industrial District. Therefore, in the political, economic and military spheres, intergovernmental dialogue is starting to take place in a lively fashion.

Conclusion

We have seen the current status of the DPRK economy with a focus on three aspects: the domestic economy, the external economy, and North–South relations. The DPRK economic crisis gained its initial momentum from the collapse of the former–Soviet Union and Eastern Europe in the early 1990s, weathered the worst period of 1995–97, and from 1998 has been moving toward recovery. The preparation for economic reform was found to have been carried out at the very bleakest of times. In 1998 the first buds could be seen from the economic reform measures in their various forms, and through the revision of salaries and prices of 1 July 2002 named the “Measures for the Improvement of Economic Management”, this came to be known to the outside world as well.

Resulting from the North–South presidential summit of 15 June 2000, in the area of North–South relations the undertaking of large-scale projects became possible with agreement between the two governments. As a result North–South commerce has increased, and North–South economic interchange has been actively carried out in the Kaesong Industrial District, the Kumgangsan Tourist Region, and elsewhere. This has shown itself in the increase in the share occupied by North–South trade within the DPRK economy as a whole.

The DPRK, even as it is continuing to uphold a socialist planned-economy, is continuing, in the area of domestic economic policies, to make possible the adoption of policies which are rather more flexible compared to those in the past. Furthermore, policies have been adopted which place relatively more importance on the daily lives of the people. At the same time, it is striving to make a reality its moves to get investment from overseas, to enter world financial organizations and to strengthen economic interchange with the outside world, along with the improvement of its international relations.

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Please note that some references within the text relate to that publication.

References

Japanese language references

“Yearbook of Asian Affairs”, edited by JETRO Institute of Developing Economies, individual years

JANG Jin-u, (2007a) “The DPRK, which is Emphasizing the Development of Science and Technology in the Construction of an Economically-Strong Country”, *ERINA Report Vol. 78 (November 2007)*, pp. 18–21

JANG Jin-u, (2007) “Improvement of Economic Management in the DPRK with an Emphasis on Material Benefit”, *ERINA Report Vol. 76 (July 2007)*, pp. 54–57

Masahiko NAKAGAWA, (2005) “The Current State of the Economy and the Economic Reforms”, *Kim Jong-il’s Economic Reforms*, edited by Masahiko Nakagawa, JETRO Institute of Developing Economies, February 2005, pp. 1–14

PAK Kyong Chol, (2007) “The DPRK’s Economic Interchange and Prospects in Northeast Asia”, *ERINA Report Vol. 77 (September 2007)*, pp. 58–60

PAK Jae-hun (2005) “Developments in Economic Reconstruction as Seen from the Industrial Sectors and the National Budget”, *Kim Jong-il’s Economic Reforms*, edited by Masahiko Nakagawa, JETRO Institute of Developing Economies, February 2005, pp. 29–52

YUN Jae-chang (2007) “The Construction of a Socialist, Economically-Strong Country in the DPRK”, *ERINA Report Vol. 77 (September 2007)*, pp. 55–57

Ri Gisong (2006) “The Economic Construction Environment in the DPRK at the Beginning of the 21st Century”, *ERINA Report Vol. 72 (November 2006)*, pp. 18–22

Ri Haeng-ho (2007a) “The US Economic Sanctions on the DPRK”, *ERINA Report Vol. 78 (November 2007)*, pp. 15–17

Ri Haeng-ho (2007) “Issues Confronting DPRK Agriculture”, *ERINA Report Vol. 73 (January 2007)*, pp. 63–67

Ri Gum-hwa (2007) “The Development and Use of Information Technology in the DPRK”, *ERINA Report Vol. 74 (March 2007)*, pp. 10–12

Ri Yong-ok (2007) “The DPRK which is Concentrating its Efforts in the Four Priority Sectors”, *ERINA Report Vol. 78 (November 2007)*, pp. 22–24

RYU Sungho (2007) “Developments in DPRK Financial Reforms—Focusing on the Introduction of a Commercial Banking System”, *ERINA Report Vol. 78 (November 2007)*, pp. 25–30

Korean language references

Ministry of Unification, ROK (2007) "2007 Unification White Paper", Ministry of Unification, ROK

Ministry of Unification, ROK "(Monthly) Developments in North–South Exchange and Cooperation", individual editions

Ministry of Unification, ROK, and the Korea International Trade Association (2006) "Developments in North–South Trade, Fiscal 2005", Ministry of Unification, ROK

Korea International Trade Association (2007) "Developments in North–South Trade, January–December 2006", Korea International Trade Association

Korea International Trade Association (2007a) "An Assessment for 2006 and the Prospects for 2007 of North–South Trade, and the Bottlenecks", Korea International Trade Association

CHOE Jong-kwon "A number of Problems Raised by the Restructuring and Modernization of Factories and Businesses", *Kim Il-sung University Gazette (Philosophy and Economics) 2007, No. 2*, pp. 55–58