



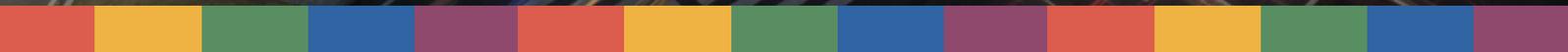
# KOREA'S ECONOMY

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Volume 27





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# INCREASING DEPENDENCY: NORTH KOREA'S ECONOMIC RELATIONS WITH CHINA

*By Dick K. Nanto*

As the economy of the Democratic People's Republic of Korea becomes increasingly isolated, it depends more and more on the People's Republic of China for survival and development. The PRC is North Korea's closest ally; largest provider of food, fuel, and industrial machinery; and arguably the country most able to wield influence in Pyongyang. For the DPRK, China is the partner of first and last resort. It is the first to provide outside validation of plans and often is both first and last at bat in attempts to mitigate the adverse consequences of North Korean provocations. Whether it be hosting the first foreign visit by young Kim Jong-un or preventing strong sanctions language in a United Nations resolution, Beijing stands at the head of a short line of countries willing to side with, or at least humor, North Korea. The PRC also is the initial and final resort for Pyongyang in dealing with shortages of food, fuel, investment capital, and economic expertise.

## **China's Interests in the DPRK**

Beijing's first priority on the Korean Peninsula is stability both in the ruling regime and in the country as a whole. The known status quo seems preferable to the prospect of an economic or political collapse that would send refugees flooding into China and create conditions that could invite intervention by the UN collectively or by South Korea or the United States individually. North Korea also serves as a buffer along part of China's extensive borders. Even though some Chinese have indicated that they would look with favor on a united North and South Korea, in reality the existence of a friendly and dependent buffer state that provides some distance from South Korea remains attractive. Given the protests by Beijing to joint U.S.–South Korean naval exercises close to China's exclusive economic zone, the prospect of a united Korea possessing nuclear weapons, friendly to the United States, and directly across the Yalu River would be anathema indeed.

Among some of China's elite, however, there is creeping dissatisfaction with the way that the DPRK is becoming a pariah state that often works at cross-purposes to China's national interests. China, itself, once had an economic system similar to that in North Korea. The PRC of the 1960s consisted of collective farms, food rationing, central planning, a lack of market pricing and incentives, little trade or foreign investment, and a hostility toward Western ideas and methods. While this system provided support for the governing regime in Beijing, it also brought mass starvation, misguided attempts to increase production using indigenous technology (Great Leap Forward), periodic campaigns to purify ideology (Cultural Revolution), and a complete disconnect between the consumer and technological revolutions being experienced not only in the West but right on its own doorstep in Japan, South Korea, and Taiwan. In dealing with the DPRK, Chinese officials see a moribund economic system of the type they abandoned long ago.

Beijing has given Kim Jong-il tours of industrial and agricultural sites in China that have been the foundation of China's spectacular economic development, and Chinese leaders have urged him to open the DPRK economy more to foreign investment and reforms. The response by Pyongyang officials has gone on dual tracks. On one side they have cooperated with China on developing the border area between the two countries and creating institutions necessary to attract foreign investment—not only from China but from other countries of the world. On the other side are periodic attempts to undo economic reforms and to rid the country of the influence of market capitalism.

The power elite in Pyongyang have been highly suspicious of markets, partly because the public distribution system has been a tool for coercing desired behavior. The authorities also fear that a developing merchant class with income not dependent on the government will become better informed and connected with the

outside world. It has the potential to form a power base separate from the Communist Party. The “jasmine revolution” in North Africa and the Middle East has done little to disabuse the regime of this fear. Pyongyang has been unwilling, until lately, to give its imprimatur even to what market reforms have already occurred, despite the fact that most of these market reforms developed out of necessity as the centrally planned economy in the DPRK faltered.

The government crackdown on what it considers illicit buying and selling of goods on markets essentially has criminalized what is considered to be normal economic activity in most countries. In many respects, this criminalization puts power back into the hands of the government authorities since they can arrest anyone at will merely for buying the necessities of life or engaging in trade. However, much of the population has no choice but to purchase household necessities, particularly food and cooking supplies, on markets. Without markets, many more people in the DPRK would go hungry.

Chinese leader Mao Zedong once described the Sino-DPRK relationship to be as close as “lips and teeth,” but in many ways it is more like a right hand and left foot. The two do not fit together well, have to perform minor contortions to clasp each other, and at times one may think the policies of the other “stink.” In recent years, China has had to respond to the same DPRK policy cycle that had frustrated other countries.

In this policy cycle, Pyongyang generates some provocation to get attention and frighten the world. Tensions rise following this artificially generated crisis, and Pyongyang waits until it appears that its negotiators can extract more aid and concessions from the United States, South Korea, and other interested countries. North Korea then launches a diplomatic charm offensive suggesting talks and the offering of promises and concessions in return for deliveries of humanitarian aid and other assistance. Once the aid is delivered and consumed and the world turns to other issues, Pyongyang returns to provocations to restart the cycle. In the 2010 version of this policy

cycle, the DPRK scored bull’s-eyes by hitting U.S. concerns over nonproliferation by announcing its uranium enrichment facility and striking at South Korea’s market-driven economy and security fears by shelling Yeonpyeong Island.<sup>1</sup> Even though Pyongyang regularly ignores China’s advice not to proceed with provocative actions, once the actions are taken, China is left to fend off hostile reactions by other countries in order to protect its own interests of maintaining stability on the peninsula.

Since the late 1990s, as long as North Korea has been able to convince Beijing’s senior leadership that regime stability for the DPRK is a necessary condition for overall stability on the Korean Peninsula, Pyongyang has been able to count on a certain level of economic and diplomatic support from China. As dependency on China has increased, however, some in North Korea have become concerned that they may have become too dependent on China. They may be giving Beijing too much leverage over their affairs. However, North Korea also appears to have used the shared interest in stability to neutralize the disadvantages of its growing economic dependence on China. The more the DPRK depends on China, the more fearful Chinese leaders may be that a sharp withdrawal of PRC economic support could destabilize North Korea.

Given the interests of China, the preferred solution to any crisis generated by North Korean provocations as advocated by Beijing has been diplomacy, or the prospect thereof. As long as the United States, South Korea, and others are talking to the DPRK, they are unlikely to take harsher actions against Pyongyang. In addition, any deliveries of economic and humanitarian aid to North Korea that result from the talks can only help to ensure stability. After the shelling of Yeonpyeong Island, for example, China did not condemn the action but called for the countries participating in the suspended six-party talks to convene what it described as emergency consultations in Beijing.<sup>2</sup>

The strategy of China with respect to Pyongyang has been to separate economic policy from diplomacy and politics. While promoting the six-party talks as a path

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1. Andrei Lankov, “North Korea Manufactured This Crisis,” CNN.com, 24 November 2010, [http://articles.cnn.com/2010-11-24/opinion/andrei.lankov.korea\\_1\\_pyongyang-leaders-uranium-enrichment-strategic-patience?\\_s=PM:OPINION](http://articles.cnn.com/2010-11-24/opinion/andrei.lankov.korea_1_pyongyang-leaders-uranium-enrichment-strategic-patience?_s=PM:OPINION).

2. Ian Johnson and Helene Cooper, “China Seeks Talks to Ease Korean Tension,” *New York Times*, 28 November 2010.

to resolving the nuclear problem and halfheartedly implementing the UN sanctions on North Korea, China has begun treating the northern region of the DPRK as if it were akin to a Chinese autonomous region.

### Trade Dependency

About half of all North Korean trade is with China. China provides a market for 42 percent of exports and 53 percent of imports of the DPRK (*Table 1*). In recent years, North Korea has been incurring a billion-dollar bilateral trade deficit with China. In 2010, this deficit of \$1.1 billion accounted for two-thirds of the DPRK's overall trade deficit of \$1.5 billion. How this deficit is

financed is unknown, but some hard currency comes from remittances from North Korean labor or relatives overseas and from contract work in other countries. Some imported goods consist of foreign aid, mainly humanitarian assistance, particularly from China, South Korea, and the UN. The DPRK also generates hard currency through illicit activities such as exporting arms, selling nuclear technology, counterfeiting, and selling illegal drugs.

As for economic assistance, in 2009 the DPRK received \$64 million in official development assistance from major donor countries and multilateral institutions. This was down from \$202 million in 2008

**Table 1: DPRK Trade with the World and with Major Trading Partners, 2005–10, millions of dollars**

Year	2005	2006	2007	2008	2009	2010
<b>North Korean exports</b>						
World total	1,787	2,398	2,505	3,228	2,395	2,854
China	499	468	584	760	793	1,188
Share (%)	27.9%	19.5%	23.3%	23.6%	33.1%	41.6%
South Korea	340	520	765	932	934	1,044
Share (%)	19.0%	21.7%	30.5%	28.9%	39.0%	36.6%
Netherlands	4	35	42	19	21	97
Mexico	70	54	44	21	13	46
<b>North Korean imports</b>						
World total	3,150	3,486	4,224	5,380	3,623	4,312
China	1,081	1,232	1,392	2,032	1,887	2,277
Share (%)	34.3%	35.3%	33.0%	37.8%	52.1%	52.8%
South Korea	715	519	1,032	888	744	868
Share (%)	22.7%	14.9%	24.4%	16.5%	20.6%	20.1%
Egypt	0	0	0	0	2	269
India	54	123 <sup>a</sup>	639 <sup>a</sup>	1,094	311	288
Balance	-1,363	-1,089	-1,719	-2,153	-1,228	-1,457

Sources: South Korean data from Ministry of Unification, Seoul. World totals are a sum of all data from reporter countries in the UN COMTRADE database. Data, particularly for 2010, not in the UN database are from *Global Trade Atlas*.

Note: Figures are not adjusted for inflation.

<sup>a</sup> Data for India for 2006 and 2007 have been adjusted for apparent miscoding.

and \$97 million in 2007.<sup>3</sup> Major donors included the United States, European Union countries, Norway, Switzerland, and Canada. In 2009, the UN provided \$14 million in aid, including \$7 million from the World Food Program. The United States also shipped \$1.9 million in humanitarian aid to North Korea in 2010 and reported exports of \$738,000 of such aid in March 2010.

China's economic assistance to North Korea accounts for about half of all Chinese foreign aid. Beijing provides the aid directly to Pyongyang, thereby enabling it to bypass the UN. For example, in 1996 Beijing agreed to provide the DPRK with free annual shipments of 1.3 million tons of oil and 2.5 million tons of coal for the ensuing five years.<sup>4</sup> China is able to use its assistance to North Korea to pursue its own political goals independently of the constraints by other countries. It is widely believed that some Chinese food aid is taken by the DPRK military.<sup>5</sup>

With respect to commodities critical to the North Korean economy, reliance on China is quite striking. In 2010, out of \$64 million in imports of cereals, China provided \$60 million, or 94 percent. The remainder of the cereal imports came from food aid from the United States and Canada and what seem to be purchases from countries such as Ukraine and Thailand.

Note that even though China exported \$250 million in foodstuffs to the DPRK in 2010, China also imported \$79 million in food from the DPRK. These imports consisted primarily of fish and shellfish (\$59 million), fruits and nuts (\$9 million), and miscellaneous grains (\$5 million). Pyongyang apparently has imported aquaculture technology from China to increase production of cultivated fish and shellfish for export.

In mineral fuel oils, China is the major supplier to North Korea. Crude oil flows through a pipeline from

Liaoning Province in northeastern China to the DPRK. In 2010, the PRC exported \$479 million in mineral fuel, oils, and electricity to North Korea.

As in other areas of policy, China is willing to use anything in its control to gain economic or political advantage. Beijing has used its exports of oil to the DPRK to apply pressure to Pyongyang in matters of policy. In 2003 and in 2006, China was reported to have temporarily cut off the supply of petroleum to the DPRK in response to North Korea's nuclear and missile tests. In December 2010, China reportedly again used a cutoff of its oil through the pipeline to dissuade Pyongyang from retaliating against South Korea for conducting live-fire exercises after the North's artillery shelling of Yeonpyeong Island.<sup>6</sup> However, even if China did temporarily halt exports of petroleum at that time, the volume was made up later, since reported trade data indicate no decline in exports of crude oil for the entire month of December 2010. China's exports of crude oil to North Korea increased by 38 percent, to \$30.8 million, in December over that in November 2010 and increased further in January 2011.

To reduce its reliance on China, the DPRK has been seeking other import sources for energy. Because of UN economic and financial sanctions, North Korea tends not to import directly from countries but instead procures crude and refined petroleum through a network of oil traders and banks in the Middle East and elsewhere. Such shipments, however, still are reported as originating in the exporting country. This buying of oil on international markets comes at a time that India is experiencing a surplus in its domestic supply of refined petroleum and has placed a cap on prices for gasoline that makes exporting more profitable than selling domestically. In 2010, India exported \$330 million in mineral fuel oils (refined) to North Korea, up from \$262 million in 2009. Egypt also has been deepening its economic ties to the DPRK. In 2010,

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3. These figures do not include aid from South Korea and China. Data from the Organization for Economic Cooperation and Development, Development Cooperation Directorate, Development Assistance Committee's statistics database.

4. Nicholas Eberstadt, "Statistical Blackouts in North Korea: Trade Figures Uncovered," *Beyond Transition*, March–April 1998, 21–23.

5. Bradley O. Babson, "Towards a Peaceful Resolution with North Korea: Crafting a New International Engagement Framework" (paper presented at conference cosponsored by the American Enterprise Institute, Korea Economic Institute, and Korea Institute for International Economic Policy, Washington, D.C., 12–13 February 2004).

6. Sunny Lee, "China Cut Off Oil to Stop N. Korea from Retaliating against South," *Korea Times*, 19 January 2011.

Egypt reported sales of \$265 million in mineral fuel exports to North Korea. Together, Egypt and India supply about the same amount of mineral fuel to the DPRK as does China.<sup>7</sup>

The energy trade between the PRC and the DPRK, therefore, is not as one-sided as it is usually characterized. Even though the DPRK imported \$479 million in mineral fuels from China in 2010, the DPRK also exported \$397 million in mineral fuels to China—almost all coal.

### **Chinese Investment in the DPRK**

Chinese investment in the DPRK has been based on combining China's capital and skills with underused resources in North Korea to generate legitimate economic activity that benefits both sides. This investment has been increasing despite the imposition of economic sanctions by the UN. The Chinese strategy with respect to North Korea resembles that taken before Hong Kong reverted to Chinese sovereignty. After agreeing to the reversion in 1984, China recognized that it had a problem. The standard of living was so much higher in Hong Kong that pressure to immigrate, legally or illegally, was considerable. At the border crossing into Hong Kong, Chinese guards had to lie down beside the road with mirrors to see whether people were trying to enter Hong Kong by stowing away under trucks. The solution was to raise the standard of living in the bordering Guangdong province by establishing special economic zones, allowing foreign investment, and putting in place various other economic reforms. By the time of the formal reversion of Hong Kong to the PRC in 1997, the nearby Chinese cities of Guangzhou and Shenzhen sported high-rise buildings, traffic jams, cell phones, and many of the accoutrements of modern life that existed in Hong Kong.

Likewise, a major thrust of the Chinese economic strategy with respect to the DPRK is to create an integrated industrial region focused on the Jilin and Liaoning Provinces and the bordering industrial provinces in North Korea. The plan includes building roads, particularly one connecting the Rajin port in North Korea to coal mines and industries in landlocked Jilin province, improving these port facilities, creating

a free trade zone on two islands in the border river between Dandong in China and Sinuiju in the DPRK, investing in North Korean industries, and eventually building an industrial complex similar to the Kaesong industrial complex, which is operated by South Korean companies. This strategy was given impetus in 2010 as the DPRK recognized that it was far behind in its goal of becoming a "strong and prosperous nation by 2012" and China was preparing its 12th Five Year Plan, a plan that emphasizes development away from the east coast and more in the interior regions of the country.

During the past decade, China has been urging Pyongyang to follow its own development pattern of reform, opening, and rapid economic growth, but the ever suspicious DPRK regime hesitated to take steps to reform the economy that could lead to a loosening of their grip on society. DPRK leadership even took a detour into Vietnam, thinking that the Vietnamese experience with reform was more adaptable to North Korea's economic conditions. After several visits to Vietnam and translating Vietnamese government manuals, leaders in Pyongyang apparently concluded that, although Vietnam did offer some lessons, relying on the mutual interest, proximity, financial resources, and capability of China was their best bet for achieving their goals both in the short term and into the future.

The development strategy that has emerged appears to benefit both sides. It is based, first, on using the resources and geography of the DPRK to generate more economic activity and to provide much-needed income on both sides of the border. Second, the DPRK is expected not only to rely on China for financial capital and expertise but to actually allow Chinese businesspeople to manage certain enterprises and activities. Thus, the DPRK will need to put in place the commercial and transportation infrastructure and government approval process that is necessary to attract foreign investment not only from China but from other countries of the world.

The first major step in this strategy is centered on what has been termed the Rason Special District. The district was named after the two towns of Rajin and Sonbong in North Korea. In 1991 this area was designated to be the DPRK's first free trade zone, but, unlike the Kae-

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7. Data from United Nations Commodity Trade Statistics (UNcomtrade); and Egyptian and Indian trade statistics.

song industrial complex, it never came to fruition. The new Rason project, launched officially in May 2011, is being developed according to a Chinese plan, with Chinese companies managing the investments and operations. The development plan calls for building or upgrading roads and port facilities; establishing international freight brokerage, export processing, and financial institutions; and investing in generating electricity, coal mining, oil refineries, manufacturing, and tourism. Initially, electricity is being imported from China. The Rason industrial complex is being operated as Chinese, and Chinese companies are to be able to hire North Korean workers who will earn foreign currency for both themselves and the DPRK government.

On 20 December 2010 the Sangdi Guanqun Investment Company from China reportedly signed a memorandum of understanding with Pyongyang's Investment and Development Group in which the Chinese company agreed to invest \$2 billion in the Rason Special District. Initially, it is to invest \$300 million in constructing a coal-fired power plant at a DPRK coal mine and build a railway, roads, and harbors and piers near it. The company also plans to build an oil refinery to refine crude oil imported from the Middle East and Russia and sell the output to China and other countries.<sup>8</sup> Analysts say North Korea hopes to tout the successful development of Rason as an achievement of Kim Jong-un, the apparent successor to Kim Jong-il.<sup>9</sup>

Another area of joint development has been the Sinuiju special economic zone. It was begun in 2002 but has never lived up to its potential. It is located in North Korea directly across from Dandong on the Chinese side, and the bridge crossing the river there is a major artery between China and the DPRK. China has promised to build an additional bridge crossing the river that will also handle rail traffic. The current focus is on a free trade zone to be established on the Wihwa and Huangjinbing Islands in the Yalu River separating

the cities of Sinuiju and Dandong. China reportedly has negotiated a 100-year lease on the two islands and intends to invest \$800 million there for industrial development. With little risk of political "contamination" of North Koreans from visitors to the islands, Chinese citizens are to be allowed visa-free access to the islands. The aim is to build an industrial park on the islands similar to the Kaesong industrial complex in North Korea near the border with South Korea.

China is the largest foreign direct investor in North Korea if the South Korean investment in the Kaesong industrial complex is not counted. In 2007, the total foreign direct investment (FDI) into the DPRK reported to the UN amounted to \$67 million, an amount that excludes investment from South Korea. Of this, China supplied \$18.4 million. In 2008, of a total of \$44 million, China supplied \$41.2 million. Given the size of the planned investments in the Rason and Sinuiju projects, China's direct investment in the DPRK is poised to increase dramatically.

About 200 Chinese companies operate in the DPRK, of which 86 are listed on China's Ministry of Commerce website. Of these companies in North Korea, 35 are in mining, 11 in agriculture and timber, 17 in industrial parts and materials, 7 in apparel, 4 in other consumer goods, 1 in iron and steel, and 1 in automotive vehicles and parts. The other 9 companies are in transportation or trading.<sup>10</sup>

### **China and Economic Sanctions**

The PRC constitutes a large gap in the circle of countries that have approved UN Security Council Resolutions 1718 and 1874 and are expected to implement them. China takes a minimalist approach to implementing sanctions on North Korea. North Korea continues to use air and land routes through China with little risk of inspection, and luxury goods from China and from other countries through China continue to flow almost unabated to Pyongyang. In

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8. Ko Soo-suk, "China Back North's Rason Project," *Joong Ang Daily*, 7 January 2011.

9. Park Min-hee, "N. Korea's Rason Special District Could Open Country to China," *Hankyoreh* (English edition), 4 May 2011.

10. "Directory of PRC Enterprises in North Korea," China-OSC Report in Chinese, English, 19 April 11, available in Open Source Center, document no. FEA20110420016995, 20 April 2011.

addition, North Korea uses front companies in China to procure items under sanction.<sup>11</sup>

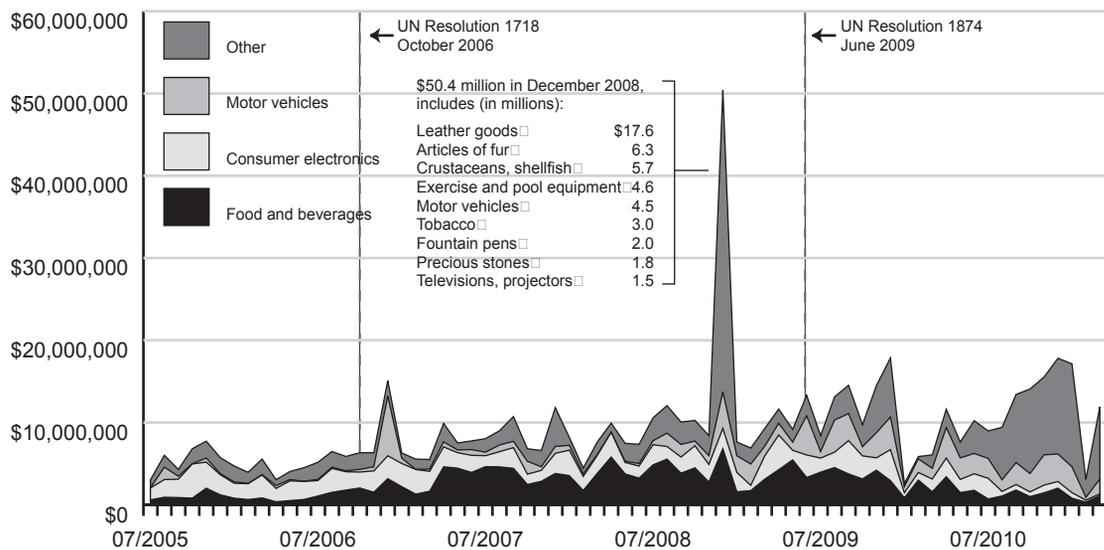
The Chinese government did cancel a joint venture with North Korea to produce vanadium (used to toughen steel alloys used in missile casings) and has intercepted a shipment of 70 kilograms of vanadium hidden in a truckload of fruit crossing the border into North Korea.<sup>12</sup> China reportedly also has called a halt to the work by a Chinese investment company to build facilities for a copper mine in Hyesan with a North Korean trading corporation under economic sanctions.<sup>13</sup>

In exports of luxury goods, however, China clearly has not done much to stem the flow of such goods into the DPRK. China claims that the ban is not enforceable because the UN resolution did not specify what goods

are considered to be luxury items. The definition of a luxury good does vary by country, but certain items would seem obvious for inclusion. For example, in July 2010, Radio Free Asia reported that Kim Jong-il had provided 160 luxury cars (made in China) to directors of provincial committees of the Korean Workers' Party and to municipal committee secretaries (higher-level officials already had vehicles).<sup>14</sup> Such cars would be included on a list of luxury goods by almost any country.

If the U.S. and UK definitions of luxury goods are used, in 2009 countries that report trade to the UN exported \$212.2 million in luxury goods to North Korea. China led the way, with exports of luxury goods of \$136.1 million (mostly tobacco, computers, and cars). Brazil exported \$36 million (mostly tobacco and precious stones), Singapore \$29 million (mostly

**Figure 1: Chinese Exports of Luxury Goods to the DPRK, July 2005–March 2011**



Source: Congressional Research Service; underlying data accessed through Global Trade Atlas with the use of monthly Chinese trade data.

11. David Albright and Paul Brannan, "Taking Stock: North Korea's Uranium Enrichment Program," Institute for Science and International Security, 8 October 2010.

12. "China Foils Smuggling of Missile-Use Material to North Korea," *Chosun Ilbo*, 25 July 2009.

13. "N. Korea Mining Project Buckles under UN Sanctions," *Chosun Ilbo*, 30 July 2009.

14. Kim Tae Hong, "Kim Jong-il Showers Loyals with Cars," *Daily NK*, 30 July 2010.

tobacco), and Russia \$4 million (mostly cars, some beef and computers, but no alcoholic beverages). Western visitors to Pyongyang in September 2010 reported that there seemed to be no scarcity of luxury goods in markets there. Most of the luxury goods seemed to be from China, but those from Japan also were plentiful. Clearly, China has not been enforcing the UN sanctions on luxury goods.

As shown in the following *Figure 1*, Chinese exports of luxury goods to the DPRK fluctuate by month but generally are increasing. There is a spike in purchases in December each year, presumably to supply the market for New Year gifts.

Figure 1 shows that Chinese exports of luxury food items have diminished considerably from \$6.8 million in December 2008 to \$1.1 million in March 2011. These include prepared beef, caviar, prepared shellfish, and alcoholic beverages. Likewise, Chinese exports of consumer electronics (personal computers and television sets, for example) have been significant, particularly in 2005, 2006, and in 2009, but in early 2011 they dropped to zero. Chinese exports of motor vehicles are highly variable but are rising despite the sanctions. In 2010, China exported 3,183 automobiles worth \$31.4 million and 4,011 trucks worth \$88.3 million to the DPRK. The “Other” category in Figure 1 includes tobacco, leather apparel, high-end tableware, and cameras. Chinese exports of tobacco products at between \$1 million and \$2.5 million per month are particularly in demand around the New Year.

### **Implications for South Korea**

The rapidly developing Sino–North Korean economic relationship poses several policy dilemmas for South Korea. Although China has always been allied with the DPRK, it has not been until lately that Pyongyang has been willing to move toward opening its economy more to Chinese and other foreign investment and to give some heed to the reforms even at the risk of philosophical “pollution” that can occur.

Four confluent forces are likely contributing to what appears to be a new stance in North Korean policy. Each of these forces seems to favor China over South Korea. The first is the need for North Korea to feed its

people and to become a “strong and prosperous nation by 2012.” Even with outside investment, this is unlikely to occur, but Chinese investment and economic cooperation will help. One of the lessons Pyongyang has learned from the Kaesong industrial complex is that it is a “money machine” that must remain in operation regardless of political and security disputes with South Korea. Now China is on tap to create a second money machine in the North.

Second, the disastrous currency reform of November and December 2009, attempts to roll back the operation of markets, and other recidivist policies managed to anger not only the ever-suffering nonelites in North Korea but the elites too. They saw the currency reform as a means to confiscate wealth. It is no wonder that the architect of this policy was executed and his relatives arrested. These botched attempts at reform, plus the visits by Kim Jong-il to China in 2010 and 2011, seemed to open the way for China to gain wider access to the North Korean economy and to proceed with what South Korea has been hampered in accomplishing because of political and security considerations. The DPRK now has no choice but to rely on China to help build its industries and assist it economically. Pyongyang now must realize that its attempts at turning back the clock on markets are futile and that its best bet for becoming a strong and prosperous nation is to adopt more of the same reforms that transformed the Chinese economy.

Third, China seems to be locking up supplies of natural resources in the DPRK. Although it is not clear what price Chinese companies are paying for access to these resources, the PRC is rapidly becoming the monopsonist buyer. By the time South Korea is in a position to tap these resources, it may find the choice supplies are already taken.

Fourth, South Korea has always assumed that future reunification will bring a merging of the two economies and a reorientation toward each other. However, the large ethnic Korean population in the Chinese provinces along the border with the DPRK in combination with attempts at more economic integration could mean that gradually the northern parts of the DPRK will become so oriented toward China that, in an economic sense, they could become almost like

an autonomous Chinese region. Even if that does not occur, it will lessen the pressure to reunite with South Korea.

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