



The Kaesong North-South Korean Industrial Complex

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Summary

This purpose of this report is to provide an overview of the role, purposes, and results of the Kaesong Industrial Complex (KIC) and examine U.S. interests, policy issues, options, and legislation. The KIC is a six-year-old industrial park located in the Democratic People's Republic of Korea (DPRK or North Korea) just across the demilitarized zone from South Korea. As of the end of 2010, over 120 medium-sized South Korean companies were employing over 47,000 North Korean workers to manufacture products in Kaesong. The facility, which in 2010 produced \$323 million in output, has the land and infrastructure to house two to three times as many firms and workers. Products vary widely, and include clothing and textiles (71 firms), kitchen utensils (4 firms), auto parts (4 firms), semiconductor parts (2 firms), and toner cartridges (1 firm).

Despite a rise in tensions between North and South Korea since early 2008, the complex has continued to operate and expand. The KIC was not shut down in 2010 despite two violent incidents between the two Koreas that year: the March sinking of a South Korean naval vessel, the *Cheonan*, which was found to be caused by a North Korean torpedo, and North Korea's artillery attack on a South Korean island in November. Indeed, the complex has become virtually the last vestige of inter-Korean cooperation. After the *Cheonan* sinking, South Korea announced it would cut off all inter-Korean economic relations except the Kaesong complex. It also has reduced the number of South Korean workers—primarily government officials and business managers—at the complex because of worries about them being taken hostage by North Korea.

The KIC represents a dilemma for U.S. and South Korean policymakers. On the one hand, the project provides an ongoing revenue stream to the Kim Jong-il regime in Pyongyang, by virtue of the share the government takes from the salaries paid to North Korean workers. South Korean and U.S. officials estimate this revenue stream to be around \$20 million per year. On the other hand, the KIC arguably helps maintain stability on the Peninsula and provides a possible beachhead for market reforms in the DPRK that could eventually spill over to areas outside the park and expose tens of thousands of North Koreans to outside influences, market-oriented businesses, and incentives.

The United States has limited direct involvement in the KIC, which the United States has officially supported since its conception. At present, no U.S. companies have invested in the Kaesong complex, though a number of South Korean officials have expressed a desire to attract U.S. investment. U.S. government approval is needed for South Korean firms to ship to the KIC certain U.S.-made equipment currently under U.S. export controls. The Korea-U.S. Free Trade Agreement (KORUS FTA), which has yet to be submitted to Congress for approval, provides for a Committee on Outward Processing Zones (OPZ) to be formed and to consider whether zones such as the KIC will receive preferential treatment under the FTA. The KORUS FTA says that the executive branch will seek "legislative approval" for any changes to the agreement. The Obama Administration says this would take the form of a law to extend any KORUS tariff benefits to products made in Kaesong or any OPZ.

Another issue raised by the KIC is whether components made in the complex can enter the United States if they are incorporated into products that are manufactured in South Korea and that qualify as originating in South Korea. This possibility is likely to be determined mainly by the KIC's evolution; the more that is produced in the complex, the more products are likely to enter South Korea's supply chain.

Contents

Developments from March 2010-June 2010	1
The KIC Survives Inter-Korean Tensions in 2010.....	2
The KIC and Inter-Korean Relations	4
Implications for U.S. Interests	5
The Development of the Kaesong Industrial Complex	5
Issues Related to the Kaesong Industrial Complex.....	9
Labor Issues.....	9
Financial Benefits for Pyongyang.....	11
Kaesong and the Proposed Korea-U.S. Free Trade Agreement	12
Negotiating History.....	12
The KORUS FTA's Text.....	13
Congress's Role	13
Labor Standards and KIC Potentially Providing a Competitive Advantage.....	14
Kaesong-Made Components and the KORUS FTA.....	14
The Control of Exports to Kaesong	14
Long-Term Geopolitical and Economic Issues.....	15
U.S. Interests and Policy Options	18

Figures

Figure 1. The Kaesong Industrial Complex and the North-South Korean Border.....	2
Figure 2. Kaesong's Potential Logistical Role.....	18

Tables

Table 1. Key Statistics for the Kaesong Industrial Complex	1
Table 2. Hyundai's Original Concept of the First Three Phases of the Master Plan for the Kaesong Industrial Complex	7
Table 3. Production by Category in the Kaesong Industrial Complex	8
Table A-1. Manufacturers Operating in the Kaesong Industrial Complex	22

Appendixes

Appendix A. List of Manufacturers in the Kaesong Industrial Complex	22
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Contacts

Author Contact Information	25
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Developments from March 2010-June 2010

The Kaesong Industrial Complex (KIC) is an industrial park located in the Democratic People's Republic of Korea (DPRK or North Korea) just across the demilitarized zone from South Korea. As of the end of December 2010, approximately 120 medium-sized South Korean companies were using North Korean labor to manufacture products there, employing over 47,000 workers. (See **Table 1.**) Currently, the park has much of the infrastructure (e.g., South Korean-built water, sewage treatment, and electrical facilities) to enable the completion of the complex's first phase, an 800-acre site that would contain roughly 300 foreign manufacturers employing around 100,000 North Korean workers. If the master plan of Hyundai Asan, the co-developer of the project, is followed the KIC eventually will be over 6,000 acres (nearly half the size of Manhattan Island) and include high-technology zones, shopping districts, residential areas, and facilities for tourism and recreation. At present, over 100 companies that have signed lease agreements to open factories have not done so. The complex was planned, developed, and financed largely by South Korea, and it has become a symbol of engagement between the North and the South. In 2010, about \$1.4 billion, or 76%, of the \$1.9 billion in total trade between the two Koreas was attributable to the KIC.¹

Table 1. Key Statistics for the Kaesong Industrial Complex

	End 2005	End 2006	End 2007	End 2008	End 2009	End 2010
No. of South Korean Manufacturing Firms	11	15	65	93	118 (Jan. 2010)	121
Approx. No. of North Korean Workers	6,000	11,000	23,000	39,000	42,000	47,000
Approx. No. of South Korean Workers	n.a.	700	800	1,500	960	Around 500
Annual Production Value	\$15 mil.	\$74 mil.	\$185 mil.	\$250 mil.	\$256 mil.	\$323 mil.
Exports to 3 rd Countries (i.e., not South Korea)	–	\$20 mil.	\$40 mil.	\$36 mil.	\$29 mil.	\$37 mil.

Sources: South Korean Ministry of Unification documents.

The purpose of this report is to provide an overview of the role, purposes, and results of the KIC and examine U.S. interests, policy issues, options, and legislation.

¹ South Korean Ministry of Unification, as reported by U.S. Embassy Seoul Economic Section, *North Korea Economic Briefing*, January 21, 2011.

Figure 1. The Kaesong Industrial Complex and the North-South Korean Border



Source: Prepared by CRS based on ESRI Data and Maps 9.3.1; IHS World Data.

The KIC Survives Inter-Korean Tensions in 2010

Twice in 2010, the KIC's future was thrown into doubt by a marked deterioration in inter-Korean relations. First, on March 26, 2010, a South Korean naval vessel, the *Cheonan*, sank in waters disputed by the two Koreas. Nearly 50 South Korean sailors died in the incident. A multinational investigation team led by South Korea determined that the ship was sunk by a North Korean submarine.² South Korea, backed by the United States and Japan, has said it will take the case before the United Nations Security Council. On May 24, 2010, South Korean President Lee Myung-bak also announced that North Korean ships would no longer be permitted to pass through shipping lanes under South Korean control, and that North-South trade, visits, and exchanges generally would be suspended. Exceptions were made for humanitarian aid to infants and children, and for the KIC. Propaganda radio and loudspeaker broadcasts into North Korea would also be resumed.³ South Korean Minister of Unification Hyun In-taek announced that new investments in the complex would be stopped and that the number of South Korean personnel at the complex—which had often approached 1,000 people in mid-week—would be reduced by as much as 50%.⁴

² South Korean Ministry of National Defense, "Investigation Result on the Sinking of ROKS 'Cheonan,'" May 20, 2010. The Joint Civilian-Military Investigation Group (JIG) included 25 South Koreans and 24 non-Korean civilian and military officials from the United States, Great Britain, Australia, and Sweden. North Korea has called the investigation's conclusion a "fabrication." Pyongyang Korean Central Broadcasting Station, "DPRK NDC Spokesman's Statement on ROK's Sunken Ship Investigation Results," May 20, 2010, as translated from the Korean by the Open Source Center.

³ Office of the President of South Korea, "Special Address to the Nation by the President Lee Myung-bak," May 24, 2010.

⁴ South Korean Ministry of Unification Press Release, "Announcement of Measures against North Korea," May 24, 2010. In March 2009, North Korea closed the North-South border for several days, leaving hundreds of South Korean workers unable to return home.

North Korea's Committee for the Peaceful Reunification of the Fatherland, the government organ responsible for inter-Korean relations, responded by labeling the actions by the "puppet" South Korean government as "a declaration of war against us" and announcing that it would abrogate all North-South non-aggression agreements, terminate contact with Lee's government, and "completely halt" all North-South cooperation projects, among other steps.⁵ However, the Kaesong complex was not shut down, although North Korea threatened to take this step if South Korean loudspeaker broadcasts resumed. (It also threatened to shoot at the loudspeakers.) Instead, several South Korean government workers at the KIC were expelled. South Korea did not restart its broadcasts.

Second, on November 23, North Korean artillery units fired over 150 shells onto and around Yeonpyeong Island, across the North-South disputed western sea border. North Korea claimed that the South Korean military had fired first, during routine U.S.-ROK exercises in the area. According to one report, about half the North Korean shells hit the island. The barrage killed four South Koreans (two marines and two civilians), wounded dozens, and destroyed or damaged scores of homes and other buildings.⁶ It was North Korea's first direct artillery attack on ROK territory since the 1950-1953 Korean War. South Korea responded by shooting 80 shells at North Korea. An official North Korean media outlet later said that the South Korean civilian deaths were "regrettable."⁷

The attacks prompted South Korea and the United States to hold large-scale naval exercises in the Yellow Sea area with the USS *George Washington* aircraft carrier strike group and led to closer U.S.-South Korea-Japan collaboration on security matters. In a nationally televised speech, Lee announced that South Korea would no longer hold back on retaliating for North Korean provocations. The South Korean defense minister stated that if attacked in the future, South Korea would consider using its air force to strike back in North Korean territory.⁸

Despite these tensions, it appeared that both Koreas were reluctant to allow the complex to be closed, or at least to be blamed for its closure. Aside from the park's symbolic importance, both sides would incur financial losses if it ceased operating. The KIC provides the North Korean government with a constant revenue stream of around \$2 million a month, by virtue of the share the government takes from the salaries paid to North Korean workers. The prospect of triggering social unrest due to depriving families in the Kaesong area, with a population of around 200,000, of high-paying jobs may also be a factor for the North Korean regime of Kim Jong-il, who is trying to pave the way for his son, Kim Jong-un, to succeed him.

⁵ "Press Statement by Spokesman for the Committee for the Peaceful Reunification of the Fatherland [CPRF]," Pyongyang Korean Central Television, May 25, 2010. Translated from the Korean by the Open Source Center, KPP20100525104004.

⁶ Stratfor.com, "Satellite Imagery: Tactical Details of the Korean Artillery Exchange," November 30, 2010.

⁷ "DPRK KPA Supreme Command's Communique on Artillery Gunfire Along Inter-Korean Border," Pyongyang Korean Central Broadcasting Station in Korean, November 23, 2010, translated by Open Source Center KPP20101123106004; "DPRK Commentary Says 23 Nov Clash Due to US, Civilian Casualties 'Very Regrettable'," Korean Central News Agency, November 27, 2010.

⁸ "Full Text' of ROK President Lee's 29 November 'Address to the Nation'," *Yonhap*, November 29, 2010. Lee said that for decades, South Korea had "tolerated provocations by the North time and again.... South Korea nonetheless endured these continual provocations because we entertained a slight hope that the North would change course someday.... At long last, we came to a realization ... that prolonged endurance and tolerance will spawn nothing but more serious provocations. If the North commits any additional provocations against the South, we will make sure that it pays a dear price without fail."

As for South Korea, a closure could make the central government liable for hundreds of millions of dollars in insurance payments to the South Korean companies that use the park. Although there have been conflicting reports about whether South Korean manufacturers in the park are profitable, it is possible that a number of them would suffer significant financial hardship if the KIC were closed.

The up and down treatment of the Kaesong complex in 2010 fits the patterns that have existed for the past three years.

The KIC and Inter-Korean Relations

The KIC is virtually the last vestige of the range of inter-Korean cooperation projects initiated during the period of détente between South Korea and North Korea from 2000-2008. Relations began deteriorating after new developments in both Koreas. In December 2007, a new, conservative South Korean president, Lee Myung-bak, was elected. Lee's administration cancelled a range of large-scale infrastructure inter-Korean projects that his predecessor had promised South Korea would finance, instituted a more "reciprocity-based" policy toward North Korea, and was openly critical of human rights conditions in North Korea. Lee has linked progress on a number of items in inter-Korean relations to North Korea's agreement to denuclearize.

Lee's government has been ambivalent about KIC. On one hand, the complex has been physically expanding since Lee took office. As shown in **Table 1**, the number of South Korean manufacturers operating in the complex has nearly doubled since his inauguration in early 2008.⁹ Under Lee, a number of steps have been taken to support the KIC, including providing special tax breaks to small and medium-sized enterprises that outsource their manufacturing to KIC companies; allowing KIC companies to resell their lots inside the complex; reducing health care premiums by 50% for South Korean workers in the complex; and issuing new loans and trade insurance to KIC companies.¹⁰

On the other hand, the Lee administration has halted plans for a major expansion of the complex. Of the 57 South Korean firms that have opened factories in Kaesong since Lee took office, only 7 received approval from his government. In October 2007, with the complex outgrowing the greater Kaesong area's ability to provide workers, Lee's predecessor, Roh Moo-hyun (2003-2008), promised North Korea that Seoul would build dormitories to house tens of thousands of new North Korean workers. Lee cancelled these plans. It is unclear to what extent his government will link construction of the dorms to North Korea's behavior in nuclear talks and/or to some sort of apology for the *Cheonan* sinking and the Yeonpyeong Island attack. Alternatively, the Lee government may decide to link the dorms to developments within the park. For instance, many South Koreans want more provisions for the safety of South Korean workers at the complex and to allow greater communication services (such as cell phones, which currently are prohibited at the complex).

In North Korea, Kim Jong-il's reported stroke in the summer of 2008 coincided with a more bellicose and provocative stance, including the testing of a nuclear device in May 2009. For

⁹ These new firms were those who had been granted approval during the Roh Moo-hyun government.

¹⁰ South Korean Ministry of Unification, *The Lee Myung-bak Administration's North Korea Policy*, May 2010, p. 45-52.

roughly a nine-month period from November 2008 through August 2009, the North Korean military appeared to be dictating policy decisions with regard to the KIC. During this time, North Korean authorities imposed a number of restrictions on the KIC, including closing down the border for several days in March 2009, effectively trapping hundreds of South Korean workers at the complex. The restrictions are blamed for the decline in the complex's aggregate production in 2009. The apparent reassertion of civilian control in the late summer of 2009—the time period when Kim Jong-il is commonly thought to have reasserted his authority—brought a relaxation of most of the restrictions. North Korea also stepped back from demands it had made that investors dramatically increase wages and payments.

Implications for U.S. Interests

The KIC represents a policy dilemma. On the one hand, as mentioned above, the project provides an ongoing revenue stream to the Kim Jong-il regime in Pyongyang. On the other hand, the KIC provides a possible beachhead for market reforms in the DPRK that could eventually spill over to areas outside the park and expose tens of thousands of North Koreans to outside influences and incentives. Expanding the park would exacerbate the dilemma: The regime would reap additional funds, but bringing in workers from areas north of Kaesong could also enhance the park's potential to serve as a "Trojan horse" in the medium-to-long term. The original plans for the KIC envisioned the complex eventually housing hundreds of foreign (i.e., non-North Korean) manufacturers, employing hundreds of thousands of North Korean workers.

The United States has limited direct involvement in the KIC, which the United States has officially supported since its conception. At present, no U.S. companies have invested in the Kaesong complex, though a number of South Korean officials have expressed a desire to attract U.S. investment. U.S. government approval is needed for South Korean firms to ship to the KIC certain U.S.-made equipment currently under U.S. export controls. The Korea-U.S. Free Trade Agreement (KORUS FTA), which has yet to be submitted to Congress for approval, provides for a Committee on Outward Processing Zones (OPZ) to be formed and to consider whether zones such as the KIC will receive preferential treatment under the FTA (see "Kaesong and the Proposed Korea-U.S. Free Trade Agreement" below). The EU-Korea FTA, which was signed in 2009, contains a similar provision.

The Development of the Kaesong Industrial Complex

The KIC resulted from an initiative led by the Hyundai Group beginning in 1998 that coincided with the Republic of Korea's (ROK) "sunshine policy" that attempted to improve relations between South Korea and the DPRK. The KIC is located about 106 miles southeast of Pyongyang and 43 miles north of Seoul just across the demilitarized zone (DMZ) in the DPRK. The purposes of the KIC as stated by South Korea have been to develop an industrial park in which South Korean businesses could manufacture products using North Korean labor, provide an opening for North Korea to liberalize and reform its economy, and ease tensions across the DMZ. Although begun primarily as a private sector venture, both governments are heavily involved in the project. Groundbreaking occurred in June 2003 and again in April 2004. Hyundai Asan and the Korea Land Corporation (both from South Korea) have been developing and managing the complex.

South Korean companies operating in Kaesong receive certain incentives from the ROK government and have certain rights as determined by negotiated agreements with the DPRK. The KIC is a duty-free zone, with no restrictions on the use of foreign currency or credit cards and no visa required for entry or exit. Property and inheritance rights are ensured. South Korean law breakers in Kaesong are not to go on trial in the North.¹¹ The corporate tax rate is 10% to 14% with an exemption for the first five years after generating profits and a 50% reduction for the ensuing three years. The South Korean government (through its Inter-Korea Cooperation Fund) offered companies that established their operations in the KIC (in the pilot project and first phase) loans with low interest rates equal to those applied to public works projects. These loans totaled about \$40 million as of the end of 2005.¹² Out of the first 26 firms to either begin operations or contemplate beginning operations in the near term, 25 of them applied for loans from the Inter-Korea Cooperation Fund.¹³ South Korea also provides political risk insurance that will cover financial losses up to 90% of a company's investment in the KIC up to 5 billion South Korean won (\$5.4 million). Under a South Korean law passed in April 2007, South Korean small and medium-sized firms operating in the KIC are eligible for state subsidies and other benefits equal to their counterparts at home.¹⁴

Table 2 shows the first three phases of the master plan for the project. The first phase encompasses 800 acres with as many as 300 South Korean firms operating in the complex. At the end of phase 3, the plan calls for as much as 4,800 acres in the industrial zone with as many as 1,500 firms employing 350,000 North Korean workers and producing \$16 billion worth of products per year. It also includes 2,200 acres in a supporting zone with residential facilities (dorms), commercial establishments (hotels, restaurants, offices, conference rooms), and tourist facilities (golf course, peace park, theme park). The Master Plan also includes an Expansion Zone of 1,600 acres for industrial use and 4,000 acres for support. This would be used after phase 3 and would accommodate an additional 500 companies, 150,000 employees, and estimated production of \$4 billion per year. Counting the expansion zone, the grand totals for the Master Plan would be 6,400 acres for the Industrial Zone (10 square miles), 6,200 acres for the Supporting Zone, 2,000 companies, 500,000 workers, and \$20 billion per year in products. The industrial and supporting zones together cover an area roughly one-fifth the size of Washington, DC.

¹¹ Under the Agreement Regarding Admission and Staying in the Kaesong Industrial Complex and Mt. Kungang Special Tourism Zong (a.k.a. the Passage Agreement), the principle of compulsory repatriation of offenders was acknowledged by Pyongyang. This was important for South Korean businesses because under North Korean law, even crumpling a newspaper that displays Kim Jong-il's picture is considered a criminal act. (See Lim, Eul-chul. *Kaesong Industrial Complex, History, Pending Issues, and Outlook*, Seoul: Haenam Publishing Company, 2006, pp. 42-43.)

¹² Hyundai Asan. *Kaesong Industrial Park*, brochure. c. 2006. ROK. Ministry of Unification. Gaesong Industrial Complex: Frequently Asked Questions (May 21, 2006).

¹³ Lim, Eul-chul. *Kaesong Industrial Complex*, op. cit., p. 172.

¹⁴ South Korean Assembly Passes Bill on Inter-Korean Industrial Complex. Yonhap News Agency, April 27, 2007. Reported by BBC Monitoring Asia Pacific.

Table 2. Hyundai's Original Concept of the First Three Phases of the Master Plan for the Kaesong Industrial Complex

Year	Phase I (includes pilot) 2002-2007	Phase 2 2006-2009	Phase 3 2008-2012
Total Land at Completion of Stage	800 acres in Industrial Zone. Kaesong City as a Supporting Zone	2,000 acres in Industrial Zone 800 acres in Supporting Zone	4,800 acres in Industrial Zone 1,600 acres in Supporting Zone
Total ROK Firms at Completion of Stage	300	800	1,500
Total DPRK Workers at Completion of Stage	100,000	200,000	350,000

Source: ROK, Ministry of Unification.

The KIC aims to attract South Korean companies, particularly small and medium-sized enterprises, seeking lower labor and other costs for their manufactured products as an alternative to establishing subsidiaries in China or other low-wage markets. As indicated in **Table 1**, by the end of 2010, about 120 companies had begun operations in Kaesong and were employing over 47,000 North Korean workers.

Of the \$374 million initial cost for the first stage, \$223 million was to be provided by the South Korean government. Much of the supporting infrastructure has been built, including a job training center, a water supply plant (which sends about one-quarter of its 60,000 tons/day capacity to Kaesong City), a wastewater treatment plant, and an electricity substation. In December 2006, the Korea Electric Power Corporation connected North Korea and South Korea by a 100,000 kilowatt power-transmission line and in June 2007 began transmission of high-voltage electricity for use by the companies in the KIC. In December 2007, the two Koreas announced what was to be daily train service across the demilitarized zone along a recently reconnected rail line between the two Koreas. Regular train service, however, has not begun. The plan is for the trains to connect the KIC to South Korea in the south and to China in the north. Currently, the trains terminate south of Kaesong, in Bongdong, which does not have loading facilities.¹⁵ Meanwhile, Kaesong is connected to South Korea by a road that has thousands of vehicles per day passing through the checkpoints.

The 15 companies operating in the Pilot Industrial Complex in Kaesong in 2006 and their products included Sonoko Cuisine Ware (kitchenware), SJ Tech (semiconductor component containers), Shinwon (apparel), Samduk Trading (footwear), Bucheon Industrial (wire harness), Taesung Industrial (cosmetics containers), Daewha Fuel Pump (automobile parts), Munchang Co. (apparel), Romanson (watches, jewelry), Hosan Ace (fan coils), Magic Micro (lamp assemblies for LCD monitors), JY Solutec (automobile components and molds), TS Precision Machinery (semiconductor mold components), Yongin Electronics (transformers, coils), and JCCOM (communication components).¹⁶

¹⁵ Economist Intelligence Unit. South Korea Country Report. January 2008.

¹⁶ Republic of Korea. Ministry of Unification. Gaeseong Industrial Complex Project—Status and Tasks, June 2005.

As shown in **Table 3**, in 2010, the KIC-produced goods totaled \$323.3 million, about a 25% increase from 2009. As of the end of December 2010, a little over half of the cumulative production total had been in textiles and clothing, around 20% had been in electronics products as well as in metals/machinery, and about 10% had been in chemical products. The share of textile and clothing production has increased over time, from 46% in 2007 to 53% in 2009.¹⁷ Examples of the variety of products made in Kaesong include socks, pajamas, shoes, auto parts (four firms), semiconductor parts (two firms), toner cartridges (one firm), fish nets, and motorcycle helmets.

Currently, all products made in the KIC are shipped to South Korea for sale there or for export after clearing customs in the ROK. The primary export destinations in 2010 were Australia, the European Union, Russia, and China. Other than labor, land, and site construction materials, there now is no local procurement of inputs into the manufacturing processes in the KIC nor are products manufactured in the KIC sold in North Korean markets. Most companies there use labor-intensive manufacturing processes with raw materials and intermediate goods from South Korea shipped to Kaesong for final assembly. As the KIC is expanded, however, companies could procure some of their manufacturing inputs locally.¹⁸

Table 3. Production by Category in the Kaesong Industrial Complex
(US \$1,000)

	Textiles and Clothing	Chemical Products	Metals and Machinery	Electric and Electronic Products	Other	Total
2005	6,780	1,768	5,250	1,108	-	14,906
2006	27,793	10,900	20,853	14,191	-	73,737
2007	85,543	18,262	41,947	39,027	-	184,779
2008	132,179	21,785	49,250	47,162	1,046	251,422
2009	152,050	26,179	37,312	37,584	3,350	256,475
2010	179,235	32,092	48,637	59,147	4,212	323,323
	71 firms	9 firms	23 firms	13 firms	5 firms	121 firms

Source: ROK, Ministry of Unification documents.

It is not yet clear whether South Korean companies operating in the KIC are doing so primarily for political purposes or whether their operations in the complex are economically viable. Also, it is not clear whether companies in the complex would be economically viable without South Korean government support in providing infrastructure and loans with below-market interest rates. The KIC does provide small and medium-sized businesses access to labor costs lower than those in China or Vietnam, a workforce that speaks the same language, and proximity to large markets in South Korea. Some companies appear to be using production in Kaesong to replace that in China, South Korea, or elsewhere, but others may be using government-subsidized loans and political risk insurance to invest in politically popular projects. The long list of companies that have applied to enter the KIC, however, indicates that investments there likely are seen as profitable for most businesses. It also should be noted that an estimated 40% of the small and

¹⁷ Figures derived from statistics provided by ROK Ministry of Unification. See **Table 3**.

¹⁸ ROK. Ministry of Unification. Gaesong Industrial Complex: Frequently Asked Questions (May 21, 2006).

medium-sized South Korean companies that established operations in China have not been successful there. Many have withdrawn from that market. The KIC is viewed as essential for survival by some of these companies.¹⁹

The experience of some of the early investors in Kaesong may be indicative of the economic viability of the project. ShinWon (clothing) established operations in the KIC to take advantage of the dexterity and lower cost of North Korean workers, favorable logistics, and to avoid nontariff barriers in China and Southeast Asia. By manufacturing about 16% of five of its clothing lines there, it expects to accrue considerable savings in production costs. It considers its Kaesong factory to be optimal when compared with those it has in China, Indonesia, Vietnam, and Guatemala.²⁰

Samduk Trading Company produces high-quality shoes in the KIC. Start-up costs were high because of the need to train workers. It took eight months for some production lines to reach 60% of the productivity level of South Korean companies. The Romanson company (watches) finds the KIC superior to production in China because of the common language and low labor costs. It reportedly plans to move 75% of its watch production to the KIC. The Moonchang company (uniforms, seat covers, leisure clothes) faced a rough start in dealing with its North Korean workers but feels it is now on the right track. The Woori Bank is in a difficult situation because of the limited customer base and low demand for personal or business loans. Its main business is currency exchange. It provides zero interest rates on deposits because there are no means to make profits by investing deposits elsewhere in North Korea.²¹

Issues Related to the Kaesong Industrial Complex

The KIC has raised several issues with U.S. policy makers. These include labor conditions, financial benefits for Pyongyang, the KIC in the KORUS FTA, and the control of U.S. exports to Kaesong.

Labor Issues

A question with respect to the KIC has been the conditions for North Korean workers there and whether they are being exploited.²² In January 2007, Jay Lefkowitz, President Bush's special envoy for human rights in North Korea, wrote that one of the concerns he had with the Kaesong Industrial Complex is that authorities take a portion (as much as 45%) of the wages paid by the South Korean companies. He noted that verified details are elusive, and neither the DPRK nor South Korean government, nor any company, has been able to state definitively how much of his or her wage a Kaesong worker is allowed to keep.²³

¹⁹ Lim, Eul-chul. *Kaesong Industrial Complex, History, Pending Issues, and Outlook*, Seoul: Haenam Publishing Company, 2006, pp. 68-69.

²⁰ *Ibid.*, pp. 101-103.

²¹ *Ibid.*, pp. 108-126.

²² Rights Body Criticizes South Korea Over Refugee Protection, Inter-Korean Complex. Yonhap News Agency, Seoul. Reported by BBC Monitoring Asia Pacific. London, January 12, 2007.

²³ Lefkowitz, Jay P. For a Few Dollars More, *Wall Street Journal*, January 10, 2007. p. A16.

According to South Korean officials, average wages and working conditions at Kaesong are far better than those in the rest of North Korea.²⁴ The monthly minimum wage is \$60.78, or between \$2 and \$3 per day. On top of the minimum wage, companies pay the North Korean authorities a 15% social insurance fee providing for unemployment and occupational hazards. Increases in the minimum wage are capped at 5% per year. The minimum wage has risen from \$50 per month when the park opened in 2004. General workers receive the base rate, while team leaders and heads of companies receive more. Workers also receive overtime pay.²⁵ For extended working hours, the overtime premium is 50% of the hourly wage rate. For public holidays and nighttime work (10 p.m. to 6 a.m.), the overtime premium is 100% of the hourly wage rate. In some cases, North Korean workers have asked for additional night shift or weekend work in order to qualify for additional pay.²⁶ Companies also may pay cash rewards as a special incentive. Many employees received \$20-\$30 per month in overtime pay. Thus, adding the minimum wage, the 15% social insurance fee, and the overtime payments, it appears that KIC manufacturers pay around \$100 per month for each employee.

KIC employees receive 14 days per year in vacation time. At first, North Korean workers were reluctant to ask for leave time, but now they do.²⁷ Female employees receive 60 days paid maternity leave.²⁸ As of 2006, labor costs in Kaesong are approximately 8% of those in a South Korean metropolitan area.²⁹ South Korean labor laws extend to South Korean workers in the KIC.³⁰

The wages of North Korean workers are paid in dollars (or other hard currency other than South Korean won) first to the Central Special Direct General Bureau, a North Korean government agency. Article 34 of the Labor Law of the Kaesong Industrial Complex, however, states that wages must be paid directly to employees in cash. The DPRK claims that this is not being implemented now because of the lack of foreign exchange centers in the KIC.³¹ In 2007, the ROK Ministry of Unification stated that of the \$57.50 minimum monthly salary at the time, \$7.50 or 15% of the base pay went for social insurance. The North Korean government also deducted \$15, or 30%, for a socio-cultural policy fee that goes for rental of state-owned housing, education, medical services, social insurance, and social welfare and reportedly is given to the Kaesong City People's Committee. According to the ministry, the remaining \$35 was paid to the workers in cash (in North Korean won) or as chits that could be exchanged for daily supplies (food and necessities).³² At the exchange rate of 140 North Korean won per dollar at the time, the \$35 translated into 4,900 won. (A kilogram of rice cost about 44 won if bought from North Korea's public distribution system but as much as 1,000 won if bought on the open market. The average

²⁴ The DPRK has ratified no International Labor Organization conventions.

²⁵ Kaesong Industrial District Management Committee (KIDMAC), "Kaesong Industrial Complex," December 2009.

²⁶ Kaesong Industrial Complex Management Council. Survey of North Korean Workers from Fifteen Different Companies. February 2007. (Partial translation by the ROK Embassy in Washington, DC.)

²⁷ Ibid.

²⁸ ROK. Ministry of Unification. Gaesong Industrial Complex: Frequently Asked Questions (May 21, 2006).

²⁹ Hyundai Asan. *Kaesong Industrial Park*, brochure. c. 2006.

³⁰ South Korean Assembly Passes Bill on Inter-Korean Industrial Complex. Yonhap News Agency, April 27, 2007. Reported by BBC Monitoring Asia Pacific.

³¹ ROK. Ministry of Unification. Gaesong Industrial Complex: Frequently Asked Questions (May 21, 2006).

³² Ko, Gyoung-Bin. All the Salary Goes to the North Korean Workers at the Gaeseong Industrial Complex (GIC), January 31, 2007. Ministry of Unification document #uni4101.

family consumes about 60 kilograms of rice per month.)³³ Companies provide the workers with a way to verify their wages by having them sign a ledger or provide a pay slip when they receive their pay.

North Korean workers commute to the KIC by bus provided by the Kaesong Industrial Complex Management Council and by some 1,000 bicycles also provided for workers living closer to the complex. According to the KIC Management Council, the health condition of workers at the KIC has visibly improved as they have had access to better nutrition.³⁴

The actual recruitment of workers is done by North Korea's Central Guidance Agency on Special Zone Development, a cabinet level administrative body. The South Korean hiring company, however, may reject any recruit provided or if the recruit does not demonstrate the requisite skills (e.g., sewing), hire the worker as a trainee at 70% or less of the minimum wage. Employers cannot freely punish or fire incompetent workers. They must give instructions through North Korean mid-level managers. Directly scolding employees is regarded as humiliation and prohibited.³⁵ The experience of many companies, however, is that labor management is a challenge during the start-up phase of a factory in the KIC. Gradually, however, North Korean workers begin to identify with the company, and a level of trust is developed between the South Korean executives and the North Korean managers and workers.³⁶

Currently, North Korean workers do not have the right to change employers. This promises to keep labor costs from escalating as they have in other developing markets as foreign firms bid for skilled workers. This also provides companies in the KIC with a stable (though aging) workforce.³⁷ This practice, however, conflicts with what would be consistent with internationally accepted workers' rights.

Financial Benefits for Pyongyang

A key aspect of the KIC for U.S. interests is how much the North Korean government derives in hard currency from the project, including leasing fees and its share of the wages of North Korean workers. The wages are first paid in hard currency (dollars) to a North Korean government agency that deducts for certain items before paying the North Korean workers in won or in chits to be exchanged for food and necessities. South Korean and U.S. government officials estimate that the North Korean government collects around \$2 million per month, primarily from social insurance taxes and a socio-cultural fee deducted from the wages received by North Korean workers (the socio-cultural fee reportedly goes to the Kaesong city, not the central government). In addition, there are land lease fees and other payments to the North Korean government. When the project was initiated, Hyundai Asan paid North Korea \$12 million for a 50-year lease on the entire Kaesong site. Hyundai Asan and the Korea Land Co. also purchase sand and gravel and other raw materials from North Korea for use in site development at Kaesong, though these

³³ *North Korea Today*, No. 38, September 2006. Good Friends: Centre for Peace, Human rights and Refugees. September 27, 2006.

³⁴ Kaesong Industrial Complex Management Council. Survey of North Korean Workers from Fifteen Different Companies. February 2007. (Partial translation by the ROK Embassy in Washington, DC.)

³⁵ Lim, Eul-chul. *Kaesong Industrial Complex*, op. cit., p. 144.

³⁶ *Ibid.*, p. 98ff.

³⁷ *Ibid.*, p. 103.

purchases effectively came to a halt in 2010.³⁸ Companies in the KIC also pay North Korea's job reference agency (recruiting agency) a commission of \$17 per employee sent.³⁹

Under an agreement on taxation, businesses in the KIC are subject to a 10% to 14% corporate income tax, but the tax has an exemption for five years after first generating profits and a 50% deduction for the ensuing three years. This compares favorably to corporate tax rates in South Korea (12% to 28%), China (15%), and in Vietnam (10% to 15%).⁴⁰

In 2004, the Hyundai Research Institute estimated that North Korea could receive \$9.55 billion in economic gains over the course of nine years if the KIC were to be developed fully and operated successfully. This would include \$4.6 billion in foreign currency earnings with \$700 million derived directly from the operation of the KIC, \$2.5 billion from sales of raw materials and other industrial products, and \$1.4 billion from corporate taxes.⁴¹ Considering that in international trade in goods in 2005, North Korea exported \$1.8 billion and imported \$3.6 billion, the estimated total gains of \$9.55 billion over nine years associated with the Kaesong Industrial Complex would be quite significant (provided it progresses according to plan).

Kaesong and the Proposed Korea-U.S. Free Trade Agreement

Negotiating History

During the negotiations on the KORUS FTA, South Korea requested that products exported from the complex be considered to have originated in South Korea in order to qualify for duty-free status under the proposed FTA. Under the South Korea-ASEAN FTA, for example, preferential tariffs are applied to 100 items manufactured in the Kaesong Industrial Complex.⁴² The Korea-Singapore and Korea-European Free Trade Association (EFTA) FTA agreements also include products from the KIC.⁴³ Singapore accepts 88.6% of the traded products from the KIC as long as no products are directly exported from the DPRK. The Korean FTA with EFTA limits coverage to 2.9% of the total trade and only for those exports that have first been brought into the South Korean territory and which have 60% of the total materials cost as South Korean.⁴⁴ In the negotiations between South Korea and the European Union, Seoul requested products from Kaesong be covered by the proposed FTA. The final 2009 EU-South Korea FTA, however, contains a provision similar to that included in the KORUS FTA.⁴⁵ In 2006, the European Union

³⁸ Communication from the Office of Korean Affairs, U.S. Department of State to the Congressional Research Service, June 7, 2007; 2011 communication with Ministry of Unification.

³⁹ Lim, Eul-chul. *Kaesong Industrial Complex, History, Pending Issues, and Outlook*, Seoul: Haenam Publishing Company, 2006, p. 144.

⁴⁰ *Ibid.*, pp. 73-74.

⁴¹ *Ibid.*, p. 61.

⁴² Merchandise FTA with Five ASEAN Countries to Take Effect Next Month. Yonhap News (Seoul), May 30, 2007.

⁴³ Channel News Asia, Singapore. *South Korea, Singapore Initial Free Trade Accord*, April 17, 2005. EFTA includes Iceland, Liechtenstein, Norway, and Switzerland. ROK, Ministry of Foreign Affairs and Trade. *Korea-European Free Trade Association (EFTA) FTA*, June 16, 2007.

⁴⁴ Lim, Eul-chul. *Kaesong Industrial Complex, History, Pending Issues, and Outlook*, Seoul: Haenam Publishing Company, 2006, p. 189.

⁴⁵ Article 15.2.1 of the EU-Korea Free Trade Agreement creates a Committee on Outward Processing Zones on the Korean Peninsula, which is described in Annex IV of the Protocol Concerning the Definition of 'Originating Products' and Methods of Administrative Co-Operation, http://trade.ec.europa.eu/doclib/docs/2009/october/tradoc_145192.pdf.

(15 nations) imported \$185.7 million worth of goods from North Korea. Switzerland imported \$0.8 million and Singapore \$6.6 million.

For the United States, however, from the beginning of the FTA negotiations, the U.S. position was that only products originating in South Korea would be included.⁴⁶ At a U.S. House International Relations Committee hearing on July 20, 2006, Assistant U.S. Trade Representative Karan Bhatia indicated that the proposed FTA would not cover goods made in a free-trade zone in North Korea.⁴⁷

The KORUS FTA's Text

The text of the Korea-U.S. Free Trade Agreement (signed by representatives of each government but not yet approved by Congress) does not provide for duty-free entry into the United States for products made in the Kaesong Industrial Complex. Annex 22-B to the proposed FTA, however, provides for a Committee on Outward Processing Zones (OPZ) on the Korean Peninsula to be formed and to “identify geographic areas that may be designated outward processing zones,” determine whether any such zone “has met the criteria established by the Committee,” and recommend them to the respective governments, which “shall be responsible for seeking legislative approval for any amendments to the Agreement with respect to outward processing zones.” The committee also is to “establish a maximum threshold for the value of the total input of the originating final good that may be added within the geographical area of the outward processing zone.” Decisions of the committee would require “unified consent” (this arguably provides the U.S. side with veto power over any recommendation of the committee). The criteria to be met include but are not limited to “progress toward denuclearization of the Korean Peninsula; the impact of the outward processing zones on intra-Korean relations; and the environmental standards, labor standards and practices, wage practices and business and management practices prevailing in the outward processing zone, with due reference to the situation prevailing elsewhere in the local economy and the relevant international norms.” The OPZ committee is to meet at least annually beginning a year after the agreement goes into effect.

Congress's Role

Annex 22-B gives Congress a role in deciding whether the products made in the KIC or other similar North Korean industrial parks would be included in the KORUS FTA. According to the terms of the agreement, the OPZ Committee will pass its decisions to the South Korean and U.S. governments, which then would be responsible for “seeking legislative approval for any amendments” to the KORUS FTA. For years, neither the Bush nor Obama Administrations specified what form this “legislative approval” would take. In March 2011, the office of the United States Trade Representative (USTR) issued a statement that Congress “would need to pass, and the President would need to sign, a law to extend any KORUS tariff benefits to products made in Kaesong or any OPZ.”⁴⁸

⁴⁶ For details, see CRS Report RL34330, *The Proposed U.S.-South Korea Free Trade Agreement (KORUS FTA): Provisions and Implications*, coordinated by William H. Cooper.

⁴⁷ Hyde Warns USTR to Keep Kaesong, Visas out of Korea FTA. *Inside US Trade*, July 21, 2006.

⁴⁸ March 2011 document issued by the Office Of The United States Trade Representative, “Outward Processing Zones, Kaesong, and the U.S.-Korea Trade Agreement Frequently Asked Questions”; Deputy United States Trade Representative reiterated this point in April 7, 2011 testimony before the House Ways and Means Trade Subcommittee.

Labor Standards and KIC Potentially Providing a Competitive Advantage

A question has arisen with respect to language in Annex 22-B pertaining to labor standards and practices in the KIC with due reference to the “situation prevailing elsewhere in the local economy and the relevant international norms.” Is the local economy in this case that of the DPRK or that of South Korea, and can products from the KIC be produced under conditions contrary to International Labor Organization agreements that lay out basic international standards or worker rights yet still be recommended by the OPZ Committee to be included under the FTA?⁴⁹

A further issue with respect to the KIC and the KORUS FTA is that if KIC products made with the low-cost North Korean labor are allowed to be treated as South Korean in origin under the proposed KORUS FTA, South Korean exporters would enjoy a large cost advantage over their counterparts in the United States.

Kaesong-Made Components and the KORUS FTA

Another issue raised by the KORUS FTA is whether intermediate products made in the KIC can enter the United States under the provisions of the FTA if they are incorporated into products that are manufactured in South Korea and that qualify as originating in South Korea. The same concern exists with respect to products made in China or elsewhere if they have North Korean inputs. Currently, discrete goods of North Korean origin may not be imported into the United States either directly or through third countries, without prior notification to and approval of the Office of Foreign Assets Control of the Department of the Treasury.⁵⁰

If enacted, the KORUS FTA would likely have only a marginal impact on whether the United States imports goods that contain KIC-made components. The possibility of goods of South Korean origin with North Korean content exists now. KIC-made content could also increase due to the KORUS FTA increasing U.S. imports of South Korean manufactured goods above current levels. However, whether KIC-made components enter the United States is more likely to be determined by the future evolution of the KIC itself, rather than by the fate of the KORUS FTA. If the complex expands, and/or if KIC factories begin to make more components, then South Korean and other nations’ companies could use them in manufacturing final products, which could then be exported to the United States and other countries.

The Control of Exports to Kaesong

The United States maintains restrictions on doing business with DPRK entities because of its designation as a state sponsor of international terrorism. All imports from North Korea into the United States require approval from the Office of Foreign Assets Control (OFAC), Department of the Treasury. The Department of Commerce licenses U.S. exports and re-exports, while Treasury

⁴⁹ See Letter, Rep. Sander Levin, Chair of the House Ways and Means Subcommittee on Trade to Ambassador Susan Schwab, USTR. June 12, 2007.

⁵⁰ U.S. Treasury, Office of Foreign Assets Control. *North Korea: What You Need to Know About Sanctions*. c. 2007. See Title 31, Part 500, U.S. Code of Federal Regulations.

grants general and/or specific licenses for financial transactions by U.S. persons with DPRK entities. The Department of Commerce requires a license for the export to North Korea of virtually all commodities, technology, and software, except for technology generally available to the public and gift parcels (not exceeding \$400).⁵¹ For instance, in FY2006, the U.S. Bureau of Industry and Security approved two items for export to the DPRK. They were glass (fiber optic) transmission items (5A991) worth \$213,919 and software (5D992) for \$3,600.⁵² The transmission items were telecommunications equipment used by Korea Telecom in setting up the communications lines between the two Koreas and into the KIC.⁵³

The South Korean government also maintains strict controls over exports to the DPRK. The restricted items include machinery and inspection equipment to produce metal and machines, electronics, optics, laser-related equipment, microorganism cultivating devices and chemical product facilities, and sophisticated high-technology equipment and materials. Even the latest versions of personal computers, commonly available in the South, are restricted and, if their export is approved, they have to be kept under lock and key in the KIC.⁵⁴ New high-technology monitoring systems, including tracking devices, are also being used for items with sensitive dual-use technology.

In the October 2007 summit between South Korean President Roh Moo-hyun and North Korean leader Kim Jong-il, the North agreed to improvements in how Kaesong operates, including swifter customs clearance for goods crossing its border, and better computer and cell-phone communications connections between Seoul and Kaesong factories. As mentioned above, the Lee government has made North Korea's implementation of these provisions preconditions for paying for the building of the dormitories that appear to be necessary for the KIC to undergo any significant expansion.

Long-Term Geopolitical and Economic Issues

The Kaesong Industrial Complex sits at the hub of spreading concentric sets of economic and geopolitical interests and concerns. At its narrowest sense, the KIC is a business venture in which participants are seeking profits and business advantages. On the South Korean side, the KIC provides small and medium-sized companies with a manufacturing platform and opportunity to access low-cost labor without having to go overseas to establish subsidiaries or to outsource the assembly of their products to China or other markets. On the DPRK side, the KIC provides jobs for workers who can earn relatively higher wages without crossing their borders illegally or working under contract in labor-scarce countries such as those in the Russian Far East or in Middle Eastern countries.

⁵¹ U.S. Bureau of Industry and Security. Embargoed Countries and Entities (Section 746), Export Control Program Description and Licensing Policy. For information on U.S. export controls, see CRS Report RL31832, *The Export Administration Act: Evolution, Provisions, and Debate*, by Ian F. Fergusson.

⁵² Bureau of Industry and Security, U.S. Department of Commerce, *Bureau of Industry and Security Annual Report, Fiscal Year 2006*. c. 2007, p. 93.

⁵³ The export license was approved by the U.S. Export Administration on November 16, 2005. (See Lim, Eul-chul. *Kaesong Industrial Complex, History, Pending Issues, and Outlook*, Seoul: Haenam Publishing Company, 2006, p. 206.)

⁵⁴ *Ibid.*, p. 204.

At a somewhat wider set of interests, the KIC provides a channel for rapprochement between the DPRK and South Korea. Kaesong developed partly from South Korea's sunshine policy of economic engagement with the North. It can be viewed as a confidence-building measure between two countries whose hostility toward each other has lingered since the 1950-52 Korean War. As has been the case with the extensive economic interchange between China and Taiwan,⁵⁵ the KIC may provide a bridge for communication and a catalyst for cultural interaction, and it can create stakeholders in each other's economies with a shared interest in stability, liberalization, and increased communication across the DMZ.

At a still wider set of interests, the KIC may be the proverbial camel's nose under the tent in attempts to reform, liberalize, and modernize the North Korean economy. In neighboring China in 1978, foreign businesses were first allowed to operate in special economic zones. Now foreign invested businesses generate more than half of China's exports and imports. The Chinese speak of practicing socialism with Chinese characteristics and, indeed, many state-owned enterprises still encumber the Chinese economic system. The state-owned enterprises that are successful, however, operate much like privately owned enterprises, and one is hard pressed to find other significant differences between the Chinese brand of socialism and market capitalism. In May 2010, Kim Jong-il paid his fifth visit to China to visit special economic zones and to discuss issues. He also visited an industrial site.⁵⁶ Likewise, the KIC exposes average North Koreans to modern business methods and to the accouterments of Western industrial society.

According to the Economist Intelligence Unit, the decrepit North Korean economy has "three crying needs: deeper market reforms, greater openness, and above all, massive investment to modernize decrepit plant and infrastructure."⁵⁷ The KIC potentially addresses all three of these needs to a limited extent. However, reports from North Korea indicate that the economic reforms there currently are stalled—even being reversed. Unlike China's reforms, moreover, the initiative for the KIC came from abroad, is viewed with suspicion by many, and is an isolated case. Pyongyang, however, has renamed the Rajin-Sonbong region bordering China as Rason and is attempting to attract more Chinese investment there.⁵⁸ In sum, it is still too early to tell if Kaesong will succeed, much less have a large effect on the rest of the North Korean economy.

At a geopolitical level, Kaesong is one part of the standoff between the DPRK and the United States, China, South Korea, Japan, and Russia, over North Korea's nuclear weapons program. Under the rubric of the six-party talks lie a bundle of strategic issues, such as the ability of North Korea to finance its nuclear program, the need for humanitarian and energy aid, the stability of the Kim Jong-il regime, and the enforcement of various economic sanctions being applied to North Korea. A major goal of the United States in the six-party talks is to halt and verifiably dismantle North Korea's capability to produce nuclear fuel and nuclear bombs or to proliferate nuclear material or technology to potentially hostile countries or groups. The U.S. strategy to accomplish this is a combination of sticks (sanctions, diplomatic isolation, name calling) and carrots (promises of aid, diplomatic recognition, security guarantees) conveyed to North Korea through the six-party talks, bilateral meetings, and occasional media blasts. Under this strategy,

⁵⁵ For a discussion of this issue, see CRS Report RL32882, *The Rise of China and Its Effect on Taiwan, Japan, and South Korea: U.S. Policy Choices*, by Dick K. Nanto and Emma Chanlett-Avery.

⁵⁶ See, for example, Wu Jiao, "Development is key during Kim's visit," *China Daily (Internet edition)*, May 5, 2010.

⁵⁷ The Economist Intelligence Unit. *Country Report, North Korea*, May 2007. p. 13.

⁵⁸ Scott Snyder, *Rajin-Sonbong: A Strategic Choice for China in Its Relations with Pyongyang*, China Brief Volume: 10 Issue: 7, The Jamestown Foundation, April 1, 2010.

there is little reason to provide the DPRK with any financial reward, even if it is to the benefit of South Korea, unless it shows significant progress in its commitments under the six-party talks. This is particularly the case if North Korea carries out attacks against South Korea.

The South Korean goals with respect to North Korea, however, not only include the denuclearization of the Korean peninsula but eventual reunification and reconstruction of the DPRK's economy. A major South Korean concern is the potential cost of reunification either in the form of a flood of economic emigrants to the South or in actual budgetary outlays to help rebuild the North's civilian economy. The high cost to West Germany of the integration of East Germany after the fall of the Berlin Wall has provided little comfort to the policy makers in Seoul. The South Korean strategy, therefore, has tended to be longer on carrots (promises of food, fuel, and fertilizer) and shorter on sticks (sanctions) with a heavy reliance on engagement across the interactive spectrum and on diplomacy to resolve the issue. Even after the North Korean nuclear test in 2006, South Korea continued the KIC operations. It only halted its plans to call for new applicants to enter the KIC. Likewise, North Korea's provocations in 2010 did not result in the closing of the complex. Existing production facilities continued to manufacture and expand. Although ROK President Lee Myung-bak has said he will seek more reciprocity in Seoul's dealings with Pyongyang, and he has been somewhat vague about how he will treat the KIC, his statements and actions to date have been widely interpreted to mean that phase 1 of the complex, at a minimum, will continue operating. Undoubtedly, the KIC would be a centerpiece if Lee enacts his "Grand Bargain," under which South Korea would provide massive development assistance if North Korea dismantles its nuclear program.

For South Korea, not only does Kaesong provide entry into the decrepit DPRK economy, but it is a key factor in building up and reforming the economy in the North with an eye toward eventual reunification. Beijing's strategy before the return of Hong Kong in 1997 has been instructive to Seoul. A major reason that many of the first economic reforms in China occurred in nearby Guangdong Province, particularly just across the border from Hong Kong in Shenzhen city, was that Beijing tried to stem pressures to immigrate to Hong Kong by raising the standard of living and industrial development in the region abutting the returning territory. This strategy has been so successful that some immigration, particularly of Hong Kong retirees, has been going from Hong Kong to Guangdong Province and not the other way around. Likewise, Beijing has broadened ties with Taiwan through allowing cross-strait investments, travel, business visas, communication, and other business-based activities. In some sectors, particularly in the manufacture of computers and other electronic products, Taiwan and the east coast of China have become one integrated economy. Kaesong arguably could begin a similar process with North Korea.

South Korea also aims to become a hub of East Asia. In order to accomplish this, it would like to be connected to China, Russia, and to Europe via railways that pass through North Korea. As part of the KIC project, North and South Korea have reconnected a railroad line connecting the north and south and have conducted a test run on it. (A second line on the opposite side of the peninsula also was connected.) In terms of logistics, a shipment by rail from South Korea via Kaesong to Hamburg, Germany would take about 27 days by ship, 10 days via the Trans-Siberian Railway, and 7 days via the Trans-China Railway.⁵⁹ (See **Figure 2**.)

⁵⁹ Hyundai Asan. *Kaesong Industrial Park*, brochure. c. 2006.

Figure 2. Kaesong's Potential Logistical Role



Source: Hyundai Asan

U.S. Interests and Policy Options

The three national interests of the United States that form the basis of all policy discussion are security, economic well-being, and value projection. These three national interests all play into consideration of the Kaesong Industrial Complex.

The main security concern for the United States is the location of the KIC in the DPRK. U.S. security concerns with respect to North Korea center on two major considerations: (1) the DPRK's nuclear program and (2) potential conflict across the DMZ separating North Korea and South Korea. The KIC has opposing effects upon these security considerations. On one hand, since income in any country is fungible, anything that increases revenue to the Pyongyang regime has the potential to contribute to the DPRK's military (including its missile and nuclear program). It is likely, however, that the DPRK's nuclear program has assured funding from the government. Also, given Kim Jong-il's "military first" policy, the North Korean military has top priority in the allocation of scarce economic resources. It also has call on certain economic activities and government subsidies for them. It is not clear how much, if any, income (over that used to pay for expenses related to Kaesong) for Pyongyang from the KIC currently is directed toward the DPRK military or nuclear program. Since the KIC land formerly was a military base that had to be vacated,⁶⁰ some arrangement may have been made to compensate the military for relinquishing a strategically important piece of ground. Even if the income from the KIC does not go directly into

⁶⁰ Lim, Eul-chul. *Kaesong Industrial Complex, History, Pending Issues, and Outlook*, Seoul: Haenam Publishing Company, 2006. p. 37.

military purposes, it may bolster funds for civilian purposes that had been cut because of the budgetary demands of the military. The Kim regime, moreover, uses scarce foreign exchange to bolster the loyalty of its inner circle of elites who use it to buy imported luxury goods.

U.N. Security Council resolutions 1718 (adopted October 2006) and 1874 (adopted June 2009) explicitly prohibit any member state from providing funds that go to support North Korea's nuclear weapons program. Resolution 1718 states in Section 8(d) that all Member States shall, in accordance with their respective legal processes, ensure that any funds, financial assets or economic resources are prevented from being made available by their nationals or by any persons or entities within their territories, to or for the benefit of persons or entities engaged in or providing support for the DPRK's programs related to nuclear weapons, other weapons of mass destruction, and ballistic missile related programs.

As for tensions across the DMZ, the KIC already has played an important role in increasing the level of engagement between the DPRK and South Korea and in raising the priority of economic activity relative to security concerns. Even though the border between North Korea and South Korea is heavily guarded and crossings had been rare, the military on both sides have acquiesced to the daily traffic on the North-South highway to Kaesong and the re-connection of two railways across the DMZ (along with limited tourist visits and family reunions).

In terms of the second U.S. national interest of economic well-being, the KIC currently has little relevance, although it has some effect through U.S. trade and investment relations with South Korea. U.S. companies have no investments in Kaesong and U.S. trade with North Korea in 2009 was virtually non-existent. South Korea, however, is the seventh-largest trading partner of the United States, and the United States is South Korea's third-largest trading partner. If the six-party talks on the denuclearization of the Korean Peninsula were to re-start and progress far enough, the United States could re-establish diplomatic relations with the DPRK, lift economic sanctions, and eventually grant that country normal trade relations (most-favored nation) status. If so, trade with North Korea could be done on the same basis as trade with most other countries of the world. Absent that development, South Korea's request to treat products made in the KIC as South Korean in origin would seem to be the only way to bring the KIC into the set of industrial locations open to normal or preferential trade with the United States. Meanwhile, South Korean companies exporting KIC products likely will continue to avoid the U.S. market rather than face economic sanctions and high U.S. tariffs. This may give countries that include the KIC in their FTAs with South Korea (such as ASEAN and EFTA) a possible small diplomatic advantage over the United States in dealing with Seoul. Moreover, South Korea is likely to press the United States to change its KIC policy. This could be a source of future U.S.-ROK tension even if the KORUS FTA is passed.

The third U.S. national interest is projecting U.S. values such as a market-based economy, representative government, and nations adhering to world standards for working conditions, environmental regulation, and other humanitarian considerations. In this respect, the KIC potentially could play a significant role as a demonstration project to educate North Koreans on the workings of a market-based economy. The KIC provides an opportunity for businesses to operate in North Korea according to what may be higher labor and environmental standards than exist in the rest of the country and to educate North Korean middle managers on how such standards work.

Currently, the 40,000 North Koreans employed in the KIC are too few and the project too small to have a significant impact on the development of the North Korean middle class (a factor in the

development of a more representative society), and the number of the elites in the DPRK with an economic interest in the complex probably is still relatively small. If the project continues to develop and the DPRK opens other free-trade zones, however, something akin to the economic reforms in China or the economic transformation that is now occurring in Vietnam⁶¹ could occur in North Korea. This could weaken the hold by Pyongyang on the daily lives of citizens and bring the country more into the globalized world. Such economic liberalization also could reduce pressures on North Korea to engage in illicit trade in order to cover its trade deficit⁶² and diminish the need for Pyongyang to saber rattle in order to divert attention from its domestic problems.

In the short run, however, increased revenues strengthen the regime's hand and make it less vulnerable to outside pressure. Also, spillover effects will depend on North Korea adding much more value to the production processes which it has yet to do. Finally, there is some question about the extent to which KIC is commercially viable, or whether incentives and supports given to South Korean firms are critical as opposed to marginal in their profit and loss calculations. Trade between the DPRK and South Korea tends to be government-based, in contrast to trade between China and North Korea. This may blunt the lessons learned by Pyongyang.

The United States currently has a mixed policy with respect to the KIC. Since South Korea is a close ally of the United States, Washington has been supportive of efforts by South Korea to engage the North in inter-Korean projects that benefit South Korea. On the other hand, the United States has been firm in predicating any economic or other concessions on actions by the DPRK to curtail or eliminate its nuclear program.

Major policy considerations and options for Congress, given the above U.S. interests, include the following:

- In considering whether or not to approve the KORUS FTA, Congress may express its support or non-support of the exclusion of the KIC from the FTA as negotiated. Congress may also specify the conditions under which the KIC can or can not be brought under the provisions of the proposed FTA. Congressional disapproval of the proposed KORUS FTA likely would have a large negative impact on prospects for the future of the KIC with respect to the United States.
- In the debate over the KORUS FTA, Congress may focus attention on labor and other conditions in the KIC and encourage reforms.
- If the KORUS FTA is approved, Congress may provide close oversight of the Committee on Outward Processing Zones.
- Since the United States already imposes a range of economic and financial sanctions on the DPRK, the United States could either tighten or loosen them. This could affect non-South Korean businesses in determining whether to invest in the KIC or to purchase products made there. The United States also could tighten (or loosen) U.S. controls on the export of dual-use technology items to the KIC.

⁶¹ See, for example, Bradsher, Keith, Vietnam's Roaring Economy Is Set for World Stage, *The New York Times*, October 25, 2006.

⁶² See, for example, CRS Report RL33885, *North Korean Crime-for-Profit Activities*, by Liana Sun Wyler and Dick K. Nanto.

- The United States could impose restrictions on or provide inducements to U.S. business activity in KIC.
- The U.S. government could encourage other countries (or groups of countries, such as the European Union) to (or not to) include the KIC in their respective FTAs with South Korea.
- If the DPRK takes the necessary steps to halt its nuclear program as outlined in the six-party talks, support (or oppose) measures leading toward normal trading relations status for the DPRK and the lifting of economic sanctions.
- The U.S. government could place restrictions on South Korean firms that do business in North Korea.

Appendix A. List of Manufacturers in the Kaesong Industrial Complex

Table A-I. Manufacturers Operating in the Kaesong Industrial Complex
As of February 2011

	Name of Company	Main Production Activity		Name of Company	Main Production Activity
1	Romanson (로만손)	Clock, Jewelry manufacturing	62	New Seoul Embroidery (새서울자수)	Clothing manufacturing
2	Aramode Watch Co.LTD (아라모드시계)	Watch manufacturing	63	HyupDong Textile Co., Ltd.(협동섬유)	Clothing manufacturing
3	Sin Han-guk Jungmil (신한국정밀)	Watch manufacturing	64	Dongwha (동화)	Thin-thread production and thread processing
4	Daepoong Watch Band (대풍시계밴드)	Watch manufacturing	65	한중실크유통	Burlap bag production
5	Pixies (픽시즈)	Jewelry, case for watch manufacturing	66	Best Friend (베스트프랜드)	Bags, rag doll production
6	Hyun Jin Precision Co (현진정밀공업사)	Watch manufacturing	67	Hanssem Corporation (한샘산업)	Kitchen utensils production
7	Lausanne Watch (로잔시계)	Watch manufacturing	68	SD&MALL (서도산업)	Apparel accessory manufacturing
8	N Gold Art.Co.LTD (엔골드아트)	Cubic zirconia processing	69	SDB (에스디비)	Mechanical parts production
9	Dongiljung Gongsa (동일정공사)	Watch manufacturing	70	Namkwang Engineering & Construction (남광토건)	Steel frame production
10	Samduck Corporation (삼덕통상)	Shoe & shoe parts manufacturing	71	Sunglim21 (성림정공)	Plastic goods production
11	Tae Sung Industry.Co (태성산업)	Cosmetic container manufacturing	72	Rok-Secz Garments Co.,LTD (녹색섬유)	Clothing manufacturing
12	Daewha Fuel Pump IND. LTD (대화연료펌프)	Auto parts manufacturing	73	Seil (세일)	Underwear materials manufacturing
13	Moon Chang Company (문창기업)	Clothing manufacturing	74	Changjin Apparel (창진어패럴)	Clothing manufacturing

	Name of Company	Main Production Activity		Name of Company	Main Production Activity
14	SJTECH Co. Ltd. (에스제이테크)	Electronic equipment production	75	Hongjin H.J (홍진에이치제이)	Motorcycle helmet manufacturing
15	Bucheon Industrial Co.LTD (부천공업)	Electronic parts production	76	Hong-ik Industry (홍익산업)	Food production
16	Jaeyoung Solutec (재영솔루텍)	Plastic goods production	77	YOUNG inner foam (영이너폼)	Underwear materials manufacturing
17	SHINWON Group Co.LTD (신원)	Clothing manufacturing	78	NINE (나인)	Underwear materials manufacturing
18	Sonoko Cuisineware (소노코쿠진웨어)	Kitchen utensils production	79	S & G (에스엔지)	Clothing manufacturing
19	Daekeon Corporation (대건실업)	Kitchen utensils production	80	SAE-A Trading Co.,LTD (세아상역)	Clothing manufacturing
20	JC Com Co. Ltd (제씨콤)	Communications device production	81	AI Dien Way (알디엔웨이)	Shoe manufacturing
21	Youngin Electronic Co.Ltd (용인전자)	Communications device, electronic parts production	82	Uni World (유니월드)	Auto parts manufacturing
22	HOSAN ACE Co.Ltd (호산에이스)	Mechanic, industrial-use refrigeration equipment production	83	Jahwa Electronics Co.,LTD (자화전자)	Electronic parts production
23	Migic LCD (매직엘시디)	Electronic parts production	84	J&J Trading Company (제이엔제이상사)	Auto parts manufacturing
24	TS Techonology Co.Ltd (티에스테크놀로지)	Semiconductor parts production	85	Myungjin Chemical (명진화학)	Electronic parts processing, Plating industry
25	Shinyoung Stain (신영스텐)	Kitchen utensils production	86	Hansfood (한식품)	Food production
26	JM P&P (조민포장)	Shopping bag, wrapper production	87	SM Techtex (에스엠테크텍스)	Clothing manufacturing
27	PYUNGAN Co.Ltd (평안)	Bedclothes production	88	Dongwoo Control Corporation (동우콘트롤)	Electronic parts production
28	ShinKwang Industry Co. Ltd (신광실업)	Underwear materials production	89	High-Low ENP (하이로이엔피)	Wrapper production
29	Han-guk Micro (한국마이크로)	Synthetic[chemical] fiber goods production	90	Prev (프레브)	Chemical plastic goods manufacturing
30	Peace Co.Ltd (평화유통)	Shoe production	91	Korea Electric Terminal Co.,LTD (한국단자공업)	Electronic parts production

	Name of Company	Main Production Activity	Name of Company	Main Production Activity
31	SUNGHWA Trading Co. Ltd (성화물산)	Apparel accessory production	92 Hankuk Chain Industrial Co.,LTD (한국체인)	Paper manufacturing, leather goods production
32	Mansun (만선)	Apparel production	93 Whain lenawoon (화인레나운)	Clothing and fur manufacturing
33	Goodpeople (좋은사람들)	Underwear materials production	94 Yoosung Industrial Co. (유성산업)	Leather bags, shoes manufacturing
34	Artrang (아트랑)	Apparel, bag production	95 Cuckoo Homesys Co.,,LTD (쿠쿠전자)	Home appliances manufacturing
35	Jeil Product (제일상품)	Underwear materials production	96 Daeil Textile Co., LTD (대일섬유)	Cotton fabrics manufacturing
36	Gin Gliders Inc (진글라이더)	Paraglide manufacturing	97 DKC Co., LTD (디케이씨)	Semiconductor carrier manufacturing
37	IS leports (일성레포츠)	Clothing manufacturing	98 Combase Inc (컴베이스)	Toner cartridge manufacturing
38	Evergreen (에버그린)	Clothing manufacturing	99 Doo Sung Tech (두성테크)	Electronic parts manufacturing
39	Teamsports (팀스포츠)	Clothing manufacturing	100 JMS Art Line (제이엠에스아트라인)	Textile manufacturing, sewing
40	Nine MODE.Co.Ltd (나인모드)	Clothing manufacturing	101 DMF (디엠에프)	Textile manufacturing, sewing
41	Two Line (투라인)	Clothing manufacturing	102 Jinwon Electronics (진원전자)	Chemical plastic goods manufacturing
42	Ergo Fashion (엘고패션)	Clothing manufacturing	103 C-net Connector (씨엔플러스)	Electric parts manufacturing
43	SM Bending (에스엠벤딩)	Clothing manufacturing	104 Seohan Textile (서한섬유)	Socks braid manufacturing
44	J. Fashion (제이패션)	Clothing manufacturing	105 Chon-il Trading Company (천일상사)	Textile manufacturing, sewing
45	A Jin Trading Co. (아진통상)	Clothing manufacturing	106 TaeKwang Industrial Company (태광산업)	Textile (Wool) manufacturing
46	Chic Bebe (슈크베베)	Clothing manufacturing	107 Kyongdong Enterprise (경동총업)	Socks and stocking manufacturing
47	Jinsung Industry CO., LTD (진성산업)	Clothing manufacturing	108 Baraque (바라크)	Shoe manufacturing
48	Dream F (드림에프)	Clothing manufacturing	109 Hans Industry (한스산업)	Shoe manufacturing

	Name of Company	Main Production Activity		Name of Company	Main Production Activity
49	Dong Woo Apparel (동우어패럴)	Clothing manufacturing	110	Poongyang Trading Company (퐁양상사)	Textile manufacturing, sewing
50	Chang Dae Apparel (창대어패럴)	Clothing manufacturing	111	Bum Yang Glove Co.,LTD (범양글러브)	Textile manufacturing, sewing
51	SHC (신한물산)	Fishing net production	112	Dongyang Die Casting (동양다이캐스팅)	Metal assembling goods manufacturing
52	Y.S Korea Co.Ltd (와이에스코리아)	Clothing manufacturing	113	JINSUNG Tech (진성테크)	Plastic goods production
53	Geumdam (금담)	Clothing manufacturing	114	Amos Corporation (아모스)	Chemical goods manufacturing (Stationery)
54	S & T Sports (에스앤티스포츠)	Clothing manufacturing	115	Billy Willy (오오엔옥옥닷컴)	Clothing, Trade, e-commercial industry
55	Shinhan Mode (신한모드)	Clothing manufacturing	116	Seokchon Pottery (석촌도자기)	Ceramics manufacturing
56	Gwang-il (광일실업)	Clothing manufacturing	117	SAMAS (사마스전자)	Auto parts manufacturing
57	Sugn Lim Trading Company (성림상사)	Clothing manufacturing	118	KJC Socks Co. (아주양말)	Socks braid manufacturing
58	Woongpee Case (웅피케이스)	Clothing manufacturing	119	MAST (매스트)	Socks and stocking manufacturing
59	Shin's Design House (신즈디자인)	Clothing manufacturing	120	K2 Korea (케이투코리아)	Shoe manufacturing
60	Cheongsong Trade (청송무역)	Clothing manufacturing	121	BK Electronics Co.,LTD (비케이전자)	Electronic goods manufacturing
61	V.S&S Corp.Inc (뷔에세)	Clothing manufacturing	122	DSE (디에스이)	Electric lighting device manufacturing

Source: South Korean Ministry of Unification.

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