

Kaesong Industrial Complex The Second Free Economic and Trade Area in North Korea

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1 Introduction

Free economic and trade areas (FETA) have gained popularity as an economic growth pole in many developing and transition countries (Farole, 2011; Jayanthakumaran, 2003). The most successful application of the FETA as the window and bridge for stimulating economic growth and structural transformation is the creation of special economic zones in China (Yeung, Lee and Kee, 2009; Liu et al., 2007; Cheng and Kwan, 2000). It looks as if this development concept will continue to diffuse in the less developed and transformation countries (Makabenta, 2002). North Korea is not an exception: the persistent serious economic difficulties and poverty in this country have been increasingly forcing the ruling regime to adopt the Chinese-style open-door policy. With the so-called Free Economic Trade Zone Law in 1984¹, North Korea attempted to create special economic zones which provide generous tax incentives and other privileges to foreign

¹ For example, this law includes, among other things: (a) a guarantee of freedom of investment and the right to carry out profit-making business activities within the FETA; (b) the requirement that economic activity be export-oriented; (c) the permission to possess 100% of the capital invested and the elimination of any possibility of nationalisation of foreign property; (d) the right to choose freely the form of investment, be it individual firms, joint venture or joint management; (e) the permission to bring raw materials, semi-finished goods and parts for assembly into the FETA duty-free, if the final goods are exported; (f) the permission of the tax-free overseas repatriation of profits and other legitimate revenues as well as of assets invested and the proceeds from their sale. In addition, while foreign enterprises are required to pay income tax, the rate is set at 14% within the FETA, and 10% for certain preferred high-technology activities, compared to 25% and 20% respectively in other parts of North Korea. Furthermore, such enterprises (apart from those in the service sector) will be exempted from corporation income tax for three years after the first profit-making year, provided they operate for a period of at least ten years (see also Nam and Yoo, 1999).

manufacturing firms (Lim and Lim, 2006; Kim, 2005; Lee, 2004). However, North Korean experience with its first Najin-Sonbong FETA established in 1991 has been rather disappointing (Lim 2005; Park, 2004a; Lee, 2002; Peng, 2002).

In November 2002 North Korea's Supreme People's Assembly Committee declared Kaesong as a zone which guarantees preferential economic activities and enacted the Law of Kaesong Industrial District which was amended and supplemented by decree No. 3715 of the Standing Committee of the North Korean Supreme People's Assembly on 24 April 2003 (Yoon, 2007). In fact, this Kaesong Industrial Complex (KIC) project – the establishment of the second FETA in North Korea – was initiated at the North/South summit meeting in 2000 and this project is widely acknowledged as the embodiment of South Korea's 'sunshine policy' towards the North (Snyder, 2005; Levin and Han, 2002; Nam, 2001).² More precisely the KIC is an administrative zone in North Korea with special economic legal status, in which relatively strong economic autonomy is provided and special business consideration is given to investments of South Korean firms (Kim, 2005; Nam, 2001). This symbolically important FETA is located 10 km north of the Korean demilitarised zone with direct road and rail access to South Korea, and only 60 km from Seoul. In the context of the sunshine policy South Korea has long been pursuing an expansion of inter-Korean economic cooperation and the creation of an economic community to serve the interests of both North and South Korea. The establishment of such an inter-Korean economic community has generally been acknowledged as an appropriate measure to enable the North Korean economy to become self-sustaining while also benefiting the South Korean economy (see also Kim, 2005; Koo and Nam, 2001).

The KIC was designed to attract South Korean light industries and to develop the area as an export-oriented base in the global context. In this context the FETA promotes bilateral joint cooperation between both Koreas, combining the South's capital and technology with the North's abundant land and relatively cheap labour. In particular, South Korean small- and medium-sized enterprises (SMEs) have been strongly encouraged to invest in the KIC (instead of establishing subsidiaries in China or other low-wage countries), since their involvement in the KIC would significantly reduce

² In order to ease the political tension on the Korean peninsula, South Korea's sunshine policy, which was initiated by the Kim Dae-jung administration in 1998, adopts the following major principles: (a) no absorption of North Korea in the process of unification, (b) intolerance of any armed provocation destructive to peace, (c) the principle of reciprocity for promoting mutual benefits, and (d) separation of the economy from politics (Chae, 2002; Levin and Han, 2002).

production costs and consequently increase efficiency and international competitiveness in the long run.

In spite of a promising start in 2003 which was strongly triggered by the massive infrastructure investment and financial incentives (e.g. low-interest public loans and political risk insurance for SMEs) provided by the South Korean government, the performance of the KIC project has been rather disappointing. For example, the annual production reached solely ca. 6% resp. 4% of the plan values in 2007 and 2009, due to the relatively small number of SMEs located in the KIC and the employees recruited by them. In addition, those firms have gradually become not only more labour-intensive but also less productive. Moreover, a continued expansion of less competitive textile, clothing and footwear production by SMEs in the KIC and their strong orientation to the South Korean market seriously violate the major objective of this FETA project aimed at enhancing their international competitiveness.

Furthermore, South Korea's sunshine policy was declared by Seoul in 2010 as 'dead and buried' (Nanto and Manyin, 2011). According to the 2010 white paper of the South Korean Ministry of Unification, despite the massive financial aid amounting to 4.5 billion US dollars and the intensive inter-Korean cooperation efforts paid for by the South during the last decade, neither the North's economy nor its people's lives appear to have improved. Furthermore, Pyongyang has recently started serious military provocations in the West Sea (most notably the sinking of the South Korean naval corvette, *Cheonan*, and the attack on *Yeonpyong Island* in 2010), and also conducted a number of nuclear tests.

One victim of the renewed inter-Korean political hostilities could well have been the KIC. If it becomes a scapegoat in the friction between Seoul and Pyongyang, its closure would mean the loss of ca. 6 billion US dollars in sales and investments for the South, and an increased nuclear threat. On the other hand, North Korea has recently earned around 20 million US dollars annually from the KIC, since its government takes a certain share from the salaries paid to North Korean workers. More important, its closure would badly affect approx. 47,000 North Korean workers presently involved in the inter-Korean joint ventures. Fortunately, the KIC was not shut down in 2010, despite the two aforementioned violent military incidents between the two Koreas and the subsequent declaration of the demise of South Korea's sunshine policy. Nevertheless, the KIC's mid- to long-term future has become rather uncertain.

It is obvious that the KIC project failed to realise its initial plan. Apart from the systematic investigation of the major motives, plans and incentives provided for investors in Kaesong as well as the actual performance of the

KIC in recent years, this study attempts to examine the major reasons for the weak involvement of South Korean SMEs and highlights the necessity of a mid-course amendment of the original plan, objectives and the relevant development strategies. This study is structured as follows: after this introduction, the second section provides some theoretical explanations and international experiences related to the contribution of the FETA to the economic transition. Section 3 systematically investigates the major motivations and development schedules of the KIC as well as the incentives provided for South Korean SMEs located in this enclave. Section 4 critically elaborates the discrepancies between the KIC master plan and what has in fact been delivered, and examines the main factors responsible for the failure. The final section concludes by summarizing the research findings.

2 Economic Transformation through Free Economic and Trade Areas: Theoretical Background and International Experiences

A strong integration into the international economic and business system enables a rapid introduction of market mechanisms and the modernisation of economic structure in transformation countries. International economic cooperation has traditionally been taking place in terms of trade and foreign direct investment, closely accompanied by the flow of technology and management know-how as well as access to international markets (see also Yeung, Lee and Kee, 2009). Apart from the (traditional) idea of creating competitive islands in an economy which is not yet ready to submit itself fully to international competition, the FETAs have played a transmitter role, bringing the advantages of a market economy to the domestic economy so that the whole country can become more prosperous (Aggarwal, 2006; Schweinberger, 2003). Many developing (and also some developed) countries have also established FETAs in order to attract foreign capital through the provision of generous tax incentives, to promote export activities, to create employment opportunities and to stimulate regional development. For example, Li, Whitwell and Yao (2005) and Schweinberger (2003) find a positive relationship between the presence of tax incentives and other promotion measures (e.g. easing of foreign currency regulations, decentralisation of development policy-making), on the one hand, and the growth of economic activity (also of government tax revenue) in the FETAs, on the other. A further theoretical justification for the establishment of FETA is the realisation of economies of scale in land development and in the provision

of public services and utilities, as well as the agglomeration advantages that result from having similar industries grouped together (Zeng, 2010).

The concept of FETA has been widely diversified in recent years (see also Farole, 2011). For example, in China the special economic zones expanded along the large coastal areas rather than remaining as small industrial enclaves (Yeung, Lee and Kee, 2009; Cheng and Kwan, 2000), while in Hungary the investment and other incentives originally provided in a FETA were transferred to other firms located elsewhere in the country. Secondly, the establishment of domestic firms in the FETA has traditionally been popular in India (Aggarwal, 2006), whereas some export-processing zones including the Manaus Free Zone in Brazil additionally acquired import-processing functions, due particularly to the combined pressure of local consumers demanding the high-quality goods produced in the zone, and foreign investors attracted by the potentially high profitability of sales in the local market (see also Makabenta, 2002). Finally, the classical manufacturing-oriented FETA is gradually evolving into an IT-based service-oriented zone which is also well equipped with touristic facilities as well as modern financial and business services (Farole, 2011).

Many FETAs have also failed. Such failures have often been due to mistakes made at the planning and design stage, including, for example, (a) the choice of an isolated area with poor transport infrastructure making interregional and/or international accessibility of the region difficult, (b) lack of some other basic infrastructure such as telecommunication, electricity supply, waste disposal, as well as a skilled local workforce required for new production activities (see also Park, 2004a). In addition, for the successful development of a FETA the ability and flexibility of those responsible appears to be necessary to carry out the mid-course corrections rapidly based on the effective monitoring and problem-solving mechanism, when e.g. economic and other specific circumstances change (Farole, 2011; Aggarwal, 2006).

3 The Original Kaesong Industrial Complex Development Schedule and Incentives Provided for South Korean SMEs

The KIC project was formally finalized by South Korea's Hyundai Asan Corporation (i.e. a private enterprise which is a division of the conglomerate Hyundai) and the North Korean regime in 2000. Thereafter, several inter-Korean consultations were held at both the private and governmental levels, finally leading to a breakthrough in June 2003. Development and management of the KIC has been carried out by Hyundai Asan in cooperation with

the Korea Land Corporation – a South Korean state-owned company specialised in real estate development: Hyundai Asan paid North Korea 12 million US dollars for a 50-year lease (from 2004) on the entire Kaesong site (Nanto and Manyin, 2011). The Korea Land Corporation obtained the right to “rais[e] funds to secure 1 million Pyeong [1 Pyeong = 3.3 m²] construction sites, design[], supervis[e] and sell[] in lots” (Yoon, 2007, p. 939).

As mentioned above, the KIC primarily aims to attract South Korean SMEs which would like to take advantage of lower labour costs in particular and other production costs (like land costs) that the KIC provides. In this context the KIC should ideally be a more preferable location for South Korean investments than its competitors like China and other low-cost countries. Table 1 compares some relevant business conditions which were taken into consideration when designing the KIC concept in 2002: the monthly salary of North Korean workers in the same year was 58 US dollars³ which is considerably lower than in China (100–200 US dollars) and in Vietnam (60 US dollars), and any increase was to be limited to 5% annually. The weekly working hours in North Korea are also more attractive from a business viewpoint, since they amount to 48 hours and are thus higher than the 44 hours common in China and South Korea.

TABLE 1: Selected FDI determinants – KIC, China and South Korea (2002)

	KIC	China	South Korea
Monthly wage (US\$)	58	100–200	423*
Legal working hours per week	48	44	44
Corporate income tax	10–14**	15	23–28

Notes: * Minimum wage by law; ** See also footnote 1 in this article.

Sources: Park (2004b); Yoon (2007).

In the KIC 10% corporate income tax is imposed on the profit of light industries as well as firms in science and high-tech fields while companies in other fields pay 14% (see also Table 1), compared to 15% in Chinese special economic zones. Moreover, companies that continue to be in the so-called ‘industrial zone’ for more than 15 years will be fully exempted from

³ As a low-labour-cost location for South Korean SMEs the KIC is gradually losing its attractiveness. At present the average monthly salary of North Korean workers amounts to 75 US dollars.

corporate income tax for the first five years after generating profits,⁴ followed by a 50% income tax reduction in the ensuing 3 years. Service companies that continue to be in the ‘supporting zone’ (see Table 2) for more than 10 years will also be fully exempted from corporate income tax for 2 years as from the profit generation year, combined with a 50% reduction of income tax the following year (see also Yoon, 2007).

TABLE 2: Hyundai Asan’s original master plan for the KIC project (2002–2012)

	Zone areas (acres)		Number of companies	Number of employees	Annual production (billion US\$)
	Industrial zone	Supporting zone			
Increases in the first phase including pilot (2002-07)	800	0	300	100,000	3
Increases in the second phase (2006-09)	1,200	800	500	150,000	4
Increases in the third phase (2008-12)	2,800	1,600	700	200,000	5
Increases taking place in the expansion zone	1,600	4,000	500	150,000	4
Total	6,400	6,400	2,000	600,000	16

Source: Hyundai Asan Corporation.

Hyundai Asan’s original KIC development plan consists of three stages which last from 2002 to 2012 (see Table 2). According to this ambitious 10-year master plan, the KIC industrial zone would cover 800 acres at the end of the first phase in 2007, with ca. 300 South Korean manufacturing SMEs operating in this zone. In the second stage the same master plan also includes the development of 2,400 acres for a supporting zone for residential and service facilities (including hotels, restaurants, offices and conference rooms), and recreation purposes (golf course, park, etc.). In the third phase until 2012, this zone would be further expanded to 4,800 acres in which 1,500 industrial SMEs from South Korea would be located, employing 350,000 North Korean workers. Besides, an ‘expansion zone’ of 1,600 acres for industrial use and an additional 4,000 acres for supporting purposes would also be available after the completion of the third stage. Altogether the Hyundai Asan’s master plan foresees a complex of 12,800 acres of both industrial and supporting zones which encompass 2,000 firms employing

⁴ In China such a corporate tax exemption is allowed only for two years from the profit generation year although the subsequent income tax reduction can take place for 3 consecutive years (see also Yoon, 2007).

some 600,000 workers. Moreover, annual production of 16 billion US dollars is expected in the KIC after the successful realisation of this plan.

Based on such an optimistic development schedule, Park (2004b) projects the mid- to long-term direct economic costs and benefits for both Koreas that would ensue after the establishment of a FETA in Kaesong. According to this study, economic advantages of the KIC for both Koreas would be fully realised nine years after its establishment. Taking this time phase, the improvement in annual production yielded by the KIC would reach 84 billion US dollars for South Korea, while North Korea would benefit by 0.6 billion US dollars in terms of annual salary and corporate income tax revenue. Nine years after its completion the KIC would create approximately 104,000 new jobs in the South and 725,000 in the North (Table 3).

TABLE 3: Projected economic effects of establishing KIC for two Koreas

Years after the KIC establishment	4 years	7 years	8 years	9 years	17 years
For South Korea					
Total cost of industrial park construction (hundred million US\$)	18.7				
Total annual production value (hundred million US\$)	94	217	217	839	819
Annual value added (hundred million US\$)	27	61	61	244	224
Job creation	13,000	30,000	30,000	104,000	104,000
For North Korea					
Industrial park rental revenue (hundred million US\$)	1.4				
Salary revenue (hundred million US\$)	0.6	1.3	1.3	5.0	5.0
Corporate income tax revenue (hundred million US\$)	0.0	0.0	0.0	1.0	17.8
Job creation	84,000	194,000	194,000	725,000	725,000

Source: Projections made by Park (2004b).

4 Differences between the Master Plan and Performance of the KIC, and the Reasons for its Failure

The first phase of the KIC project started in June 2003 – one year later than originally planned – and was completed in December 2007, in line with the Hyundai Asan's master plan. After the ratification of four tax and accountancy agreements between the two Koreas in August 2003, a 330-

hectare pilot district⁵ was created to examine the business conditions provided by the KIC: manufacturing started in the pilot area in December 2004 and the first factory slots on 16.9 hectares were allocated to 23 South Korean SMEs in August 2005, whereas, in the second round of factory allocations in April 2007, the ratio of company applications to available units was 2.3:1.⁶

Such a promising start was only possible thanks to the incentives additionally provided by the South Korean government for the SMEs operating there. In the first development stage the low-interest public loans were provided by the South-North Cooperation Fund⁷ which also strongly promoted the SMEs' engagement in Kaesong; these loans amounted to approximately 40 million US dollars at the end of 2005. This is one of the reasons why further success of the KIC project appears to be largely shaped by the willingness and ability of the South Korean government to finance this fund. Furthermore, political risk insurance guaranteed by the South Korean government compensates as much as 90% of the financial losses of a SME's investment in the KIC up to 5 billion South Korean won (= almost 4.9 million US dollars) – see also Nanto and Manyin (2011).

In the first KIC development phase some basic infrastructure investments totalling some 374 million US dollars have been realised, ca. 223 million US dollars of which were covered by the South Korean government. Thus, for example, (a) a telecommunication network was installed with 303 lines in December 2005 and has been expanded to 1,300 lines for telephones and facsimile machines by the end of November 2009; (b) an electrical substation was constructed in May 2007 so that the KIC could receive 100,000 kW of electricity from South Korea; and (c) the provision

⁵ The pilot phase construction was completed in June 2004.

⁶ See http://eng.unikorea.go.kr/eng/default.jsp?pgname=AFFexchanges_gaeseong.

⁷ “The Fund had been created by the [South Korean] National Assembly in August 1990 as a vehicle for funding government-level humanitarian assistance to North Korea. The government allocated 25 billion won [ca. 24 million US dollars] to the Fund in 1991, and increased its resources by an additional 510 billion won [ca. 480 million US dollars] from the period 1992–97. Thus far during the Kim Dae-jung administration, an additional one trillion won [ca. 940 million US dollars] in government resources have been made available to the Fund. The government also expanded the Fund's mandate to encompass financial support for public and private sector projects in North Korea. The Inter-Korean Exchange and Cooperation Promotion Committee, which oversees the activities of the Fund, has approved its use for small and medium firms' business projects in the North and for a major tourism project at Mt. Kumgang. The government decided to reduce the interest rate for loans from the Fund to firms engaged in inter-Korean cooperation projects from 6 percent to 4 percent beginning in 2002” (Winder, 2003, p. 221).

of water supply, sewage and waste treatment facilities was completed in October 2007.⁸

The success of a FETA has usually been measured by the amount of investment undertaken after the designation, the increase in the number of firms located in the zone and the change in zone employment, as well as in terms of total production and exports (Li, Whitwell and Yao, 2005). Table 4 demonstrates the performance of the KIC project between 2005 and 2010.

TABLE 4: Actual development of the KIC between 2005 and 2010

	2005	2006	2007	2008	2009	2010
Number of South Korean manufacturing SMEs	11	15*	65	93	118	121
Total number of workers	6,300	11,700	23,800	40,500	42,960	47,500
• Number of North Korean workers	6,000	11,000	23,000	39,000	42,000	47,000
• Number of South Korean workers	300	700	800	1,500	960	500
Total annual production value (million US\$)	15	74	185	250	256	323
• Textile & clothing	6.8	27.8	85.5	132.2	152.1	179.2 (71)**
• Chemical products	1.8	10.9	18.3	21.8	26.2	32.1 (9)**
• Metal & machinery	5.3	20.9	41.9	49.3	37.3	48.6 (23)**
• Electric & electronics	1.1	14.2	39.0	47.2	37.6	59.1 (13)**
• Others	-	-	-	1.0	3.4	4.2 (5)**
Total exports excluding South Korea (million US\$)	-	20	40	36	29	37

Notes: * These firms produce, for example, kitchenware, semiconductor component containers, apparel, footwear, wire harness, cosmetic containers, automobile parts, watches and jewellery, fan coils, lamp assemblies for LCD monitors, transformer and communication components;

** The number of firms active in different industries in 2010 is shown in bracket.

Sources: South Korean Ministry of Unification; Nanto and Manyin (2011).

Table 5 compares the plan values (shown in Table 2) together with actual KIC performance (excluding that of the expansion zone) for some selected indicators at the end of the first and the second master plan phases (shown in Table 4), i.e. 2007 and 2009, respectively. Unfortunately the realisation ratio of the plan is rather disappointing. For example, annual production realised only ca. 6% and 4% of the plan values in both years investigated, due in part to the small number of SMEs located in the KIC and of total

⁸ For more details, see http://eng.unikorea.go.kr/eng/default.jsp?pgname=AFFexchanges_gaeseong.

employees recruited by them: the ratio for both indicators (number of firms and number of employees) ranged between 22% to 24% in 2007 but further declined to around 15% to 17% in 2009.

More seriously, the productivity indicators expressed in terms of average annual production per firm and per employee were also lower than those set in the master plan. Furthermore, firm productivity declined on average from 29% to 25% between 2007 and 2009, while labour productivity also sank from 26% to 21% on average in the same period. In contrast, the labour intensity of SMEs in Kaesong, which is measured in terms of the average employees per firm, is significantly higher than anticipated in the master plan: with 366 workers per firm, company size amounted on average to approximately 110% of that estimated by the plan (= 333 employees) for 2007, average labour intensity (with 364 workers) even increasing to around 117% of the planned level (= 313 workers) in 2009.

In other words, the firms operating in the KIC have become more labour-intensive but, at the same time, experienced a decrease in productivity in the last two plan phases. In part such an unpromising development can be explained by the specific labour provision system in the KIC: although enterprises in this FETA can hire and fire, an agency of the North Korean government is responsible for providing the labour. Such a centralised system enables the state to keep some proportion of the wages paid to local workers but seriously hinders recruiting experienced and more skilled labour from the rest of the country, or attracting individuals by offering more generous terms and conditions. Furthermore, due to the prevailing low labour productivity, the transfer of advanced technology and management skills that North Korea expects from the KIC also seems to be generally difficult.

Unfortunately, all this clearly demonstrates the growing disparity between the original KIC master plan and actual project progress. Globally, past experiences show that the economic benefits of a FETA have often been much smaller than originally anticipated in the plan (see also Farole, 2011). Therefore, the KIC's slow progress is not an exceptional case but signals the necessity of an urgent mid-course amendment of its objectives and strategies. In addition, the macroeconomic benefits anticipated from KIC for both Koreas should also be thoroughly revised in accordance with the KIC's actual performance in recent years, which is much poorer than estimated (see Table 3). For instance, total annual production projected for South Korea nine years after establishing the KIC (namely 83.9 billion US dollars) should be strongly revised considering that actual annual production reached only approximately 5% of the Hyundai Asan master plan values in the years 2009 and 2010 (see Table 5). Such a correction would drastically downsize the job-creation figures projected for the South.

TABLE 5: Comparison of master plan and actual development in the KIC

	Master plan (excluding expansion zone)		Actual development		Performance ratio (= comparison of reality with master plan)	
	End of 1 st phase (2007) (1)	End of 2 nd phase (2009) (2)	2007 (3)	2009 (4)	2007 (= 3/1)	2009 (= 4/2)
No. of firms	300	800	65	118	21.7%	14.8%
No. employees	100,000	250,000	23,800	42,960	23.8%	17.2%
Annual production	US\$ 3,000 million	US\$ 7,000 million	US\$ 185 million	US\$ 256 million	6.2%	3.7%
Average number of employees per firm	333	313	366	364	109.8%	116.5%
Average annual production per firm	US\$ 10 million	US\$ 87.5 million	US\$ 2.9 million	US\$ 2.2 million	28.5%	24.8%
Average annual production per employee	US\$ 30,000	US\$ 28,000	US\$ 7,773	US\$ 5,959	25.9%	21.3%

Source: Tables 2 and 4; author's calculation.

In this context one could *a priori* argue that such a mismatch between plan and reality is due to mistakes made at the planning and design stage. For instance, the targets set in the Hyundai Asan master plan and for the individual development phases might have been too optimistic, although the choice of Kaesong as the FETA's location as well as its endowment and accessibility were considered to be reasonable and satisfactory. On the other hand, without such 'positive bubbles' created in the plan, it is doubtful whether the North would have happily approved the development of Kaesong as the country's second FETA nor that the South Korean government would have been willing to support the KIC project. However, regardless of whether the original master plan considered to have been developed under reasonably correct economic and business assumptions or not, KIC's poor economic performance in recent years (despite the generous financial and tax as well as other non-tariff incentives provided) clearly reveals that it was not very successful in attracting South Korean SMEs.

In the following, several crucial aspects are discussed that explain the reasons why South Korean SMEs have been hesitant to establish their production facilities in the KIC. Firstly, the political situation seriously damages the development opportunities of this FETA, which means that, in spite of the South's sunshine policy, its efforts towards intensive economic cooperation and the massive financial aid provided to the North, a long-term peaceful coexistence has not yet been achieved in the Korean peninsula. In particular a series of recent nuclear threats and military provocations by the North have made it clearer to the South that a win-win-type of economic cooperation with its counterpart can hardly be realised in the foreseeable future. On the other hand, the totalitarian regime in the North is not willing to abruptly introduce a market system and open its economy: to be sure it has little interest in integrating the KIC into the rest of the economy, preferring the FETA to remain an isolated enclave, as with Najin-Sonbong (Lim, 2005).

Secondly, experiences generally with FETAs show that foreign direct investments particularly in the field of manufacturing processing have been not only strongly export-oriented but also significantly affected by the size of the potential domestic market of the host country. For example, one of the major reasons for the failure of the Najin-Sonbong FETA is the fierce competition with neighbouring counterparts, e.g. Hunchun in China and Posyet and Vladivostok in Russia as potential locations for foreign firms. Hunchun was preferred since the choice of this location enabled foreign firms to penetrate easily into the huge, rapidly growing Chinese market (Nam and Yoo, 1999). Due to the prevailing weak purchasing power, the North Korean domestic market has not been very attractive to South Korean SMEs; furthermore, there is no prospect of a rapid improvement, since the country's econo-

my has long been stagnating at a very low level: in North Korea the real economic growth rate was 3.7% in 2008 after two consecutive years of contraction. This positive trend was again reversed in 2009, since the national growth rate amounted to -0.9% in that year. Consequently, it is often argued that “contributing to the creation of prosperity and jobs in the Chinese rust belt provinces along the Sino-North Korean border appears to constitute a better opportunity for [South Korean SMEs]. By building factories and infrastructure projects in [that] area [...] with the participation of South Korean private sector firms, Seoul would be assisting the development of a regional engine of growth that would surpass Kaesong. South Korean [companies] in joint ventures with Chinese firms could bring about the construction of massive industrial zones that would straddle the border” (Park, 2006).⁹

Thirdly, the SMEs producing consumer goods in the KIC have largely targeted the South Korean market, while the intermediate industrial goods (e.g. auto and computer parts) manufactured there have been largely used for the final assembly in South Korea. This is well demonstrated by the fact that between 2008 and 2010 around 65% to 70% of KIC’s total annual product was directly ‘exported’ to South Korea (see Table 4).¹⁰ Yet a continued expansion of textile, clothing and footwear production (accompanied by the decreases in labour productivity) in the KIC and its strong orientation to the South Korean market violate not only market principles but also the major objective of the KIC project; to enhance South Korean SMEs’ international competitiveness.

The dominance of the textile and clothing industry for South Korean economic development in the 1980s is history (see Nam, 2006): globally this country no longer enjoys comparative advantage as a manufacturer of these labour-intensive goods. Table 6 clearly reveals this: in the period investigated (2000–2009) South Korea’s textile exports as well as that of wearing apparel decreased from 12.7 to 7.4 billion US dollars and from 5.0 to 1.4 billion US dollars, respectively. In relative terms, this development led to a reduction of textile exports from 7.4% to 2.5% of the country’s total merchandise exports between 2000 and 2009, while the share of clothing exports declined even further from an already low level (i.e. from 2.9% to 0.4%) in the same time period. In this context, the strong involvement of South Korean textile and clothing manufacturers in the KICs in recent years

⁹ On the other hand, the supporters of the KIC emphasize that around 40% of South Korean SMEs which established production facilities in China have not been successful there (Lim, 2006; Nanto and Manyin, 2011).

¹⁰ In this context one should note that part of the final (as well as intermediate) goods produced in the KIC are further exported by the mother companies located in the South, although the scope of such re-exports is hard to measure statistically.

(Table 4) can only be interpreted as a sort of short-term survival strategy in view of the continued decline in their global competitiveness. In other words, although these firms in Kaesong have benefited from the lower production costs as well as the generous, subsidised loans and the political risk insurance provided by the South Korean government, their strong concentration on the South Korean market indicates that their involvement in the KIC has not significantly enhanced their competitiveness in the global context at all.

More seriously, such policy interventions have disturbed the allocation efficiency and the free competition on the South Korean textile and clothing market, and at the same time created a culture of dependence of less competitive SMEs (on the government subsidy) in the South. Furthermore, a large-scale import substitution of foreign textiles and wearing apparel by those from the KIC cannot be anticipated, since the KIC's production capacity is presently too small to meet the entire South Korean demand – e.g. in 2009 South Korea's textile and clothing imports (= around 7 billion US dollars) represented only 2.2% of KIC's total textile and clothing production (= 152.1 million US dollars) as shown in Tables 4 and 6, while the establishment of other similar FETAs in the North appears to be hardly feasible in the future.

South Korea has traditionally pursued out an active industrial policy, evolving from import-substitution to export-promotion and high-tech and innovation support in the course of time. This policy has always aimed at safeguarding the country's comparative advantage on the global market. The country's major export industries¹¹ now include electronic engineering (including office and telecommunication equipment) as well as the automotive industry: for instance between 2000 and 2009 South Korea's export of office and telecommunication equipment grew from 58.7 to 77.2 billion US dollars, while an even stronger increase was observed in the automotive industry, from 15.2 to 37.0 billion US dollars (see Table 6). Expressed in relative terms, both industries (electro engineering and automotive) comprised around 43% of total merchandise exports in 2000 but the share declined rather significantly to 31% in 2009, despite a slight increase in the share of automobile exports from 8.8% (2000) to 10.2% (2009). For this reason, the KIC and its promotion appear to make sense from the South Korean electronic and automobile firms' point of view, since this FETA enables them to lower production costs and improve their international competitiveness.

¹¹ In recent years South Korea has been primary exporter of semiconductors, wireless telecommunications equipment, motor vehicles, computers, steel ships and petrochemicals (see e.g. http://www.economywatch.com/world_economy/south-korea/export-import.html).

TABLE 6: Changes in South Korean exports and imports of selected manufactured products between 2000 and 2009

	Exports			Imports		
	2000	2009	2009	2000	2009	2009
	Value nominal* (billion US\$)	Share of total merchandise exports (%)	Value nominal* (billion US\$)	Share of total merchandise exports (%)	Value nominal* (billion US\$)	Share of total merchandise imports (%)
Total manufacturing	156.0	89.9	323.0	88.7	98.0	61.2
Office and telecommunication equipment	58.7	34.1	77.2	21.2	34.0	21.2
Automotive	15.2	8.8	37.0	10.2	1.8	1.1
Textile	12.7	7.4	9.2	2.5	3.4	2.1
Clothing	5.0	2.9	1.4	0.4	1.3	0.8
					186.0	57.6

Note: * Expressed in terms of current prices and current exchange rate.

Source: WTO (2010).

Together with China and Japan, the United States has traditionally been South Korea's most important trade partner for electronics, automotive and other high-tech commodities, a fact which cannot be ignored for KIC's development and export activities.¹² One obstacle to the KIC's future is the US economic embargo against North Korea, prohibiting the export of key technologies and goods, such as computers, to this country. Equally, the South Korean government also imposes strict controls over exports of items like machinery for producing metal and machines, electronics, optics, laser-related equipment, microorganism-cultivating devices, and sophisticated high-technology equipment and materials (Nanto and Manyin, 2011).

More recently the KIC has emerged as one of the major sensitive disputes in the context of the South Korea-US free trade agreement (KORUS FTA) that entered into force in 2012, whereby products made in the KIC are eligible for the FTA tariff preference and importation to the United States. In spite of the South's efforts to word the FTA agreement so that KIC products would be considered to have originated in South Korea and thus gain duty-free status, it is certain that the KORUS FTA would neither allow any North Korean products into the United States nor overrule the existing US sanctions against the North, without prior notification to and approval of the US Office of Foreign Assets Control (see also Klingner, 2011; Kim and Moussawi, 2007).¹³

5 Conclusion

The concept of the FETA as a territorial enclave in which foreign firms, benefiting from generous tax incentives and other privileges, produce goods mainly for export, found popularity in many transition countries. The Chinese special economic zones have most successfully played the role of the 'window and bridge' for stimulating economic growth and structural transformation of the entire country. The persistent economic difficulties and poverty in North Korea have forced the ruling communist regime to adopt such an open-door policy. As an export-oriented base the KIC – the second FETA in

¹² South Korea's major export markets in 2009 were China (with 23.2% of the country's total exports), the United States (10.1%), Japan (5.8%), Hong Kong (5.3%) and Singapore (3.6%). In the same year the country imported mainly from China (16.8% of the country's total imports), Japan (15.3%), the United States (9.0%), Saudi Arabia (6.1%) and Australia (4.6%), again in descending order (see <http://www.state.gov/r/pa/ei/bgn/2800.htm>).

¹³ Kaesong is not included in the South Korea-EU free trade agreement (KOREU FTA) either, which was implemented on 1 July 2011.

the North and an outcome of Seoul's sunshine policy towards this country – primarily aims at promoting inter-Korean economic cooperation, combining the South's capital and technology with the North's abundant land and cheap labour, so as to bring economic benefits for both Koreas. Despite its promising start in 2003 stimulated by the massive infrastructure investment and financial incentives (e.g. low-interest public loans and political risk insurance) provided by the South Korean government, the actual performance of the project has been rather disappointing, and consequently the anticipated mutual benefits (i.e. the win-win situation) appear to be hardly realisable from the South's point of view.

The main economic reasons for the failure of the KIC can be characterised as follows: first of all, the discrepancy between the KIC master plan and its actual performance is simply too large: for example, annual production of this FETA represented only ca. 6% and 4% of the master-plan values in 2007 and 2009, respectively, which can be attributed to the extremely weak involvement of South Korean SMEs. Secondly, SMEs participating in Kaesong have experienced increasing labour intensity over the years, which has, however, been accompanied by productivity decreases of firms and workers involved in the KIC – which hinders the transfer of advanced technology and skills and also makes it difficult to improve the SMEs' competitiveness. Thirdly, the dominance of internationally less competitive textile, clothing and footwear producers in the KIC and their strong orientation to the South Korean market (instead of the world market) violate the project's major objective of creating a strong export base. And, finally, the economic sanctions imposed by the US (as well as the EU) against North Korea have also limited the involvement of South Korea's major export industries (electronic engineering and automotive industry) in the KIC, since such measures prohibit not only the export of key technologies and goods to this country but also the import of certain North Korean products and services. All these factors highlight the urgent necessity of mid-course amendment of the KIC plan, objectives and the relevant development strategies.

One should also bear in mind that foreign direct investments are usually not only export-oriented but also significantly affected by the size of the potential domestic market is of the host country (see the case of China). Yet the North Korean domestic market is endowed with only weak purchasing power and has thus traditionally been less attractive for South Korean SMEs. It could thus be desirable to consider the development of similar FETAs in the Chinese rust belt provinces along the Sino-North Korean border, which appear to offer better economic opportunities for South Korean SMEs than the KIC. Primarily exploiting the chances which the large Chinese market

provides, they (in cooperation with Chinese firms) could construct massive industrial complexes that would expand beyond the border.

The birth of the KIC was politically motivated. Yet the renewed inter-Korean political hostility (caused by the military provocations in the West Sea in 2010 and a number of nuclear tests conducted in recent years) and the death of the sunshine policy (also in 2010) immediately brought the development of the KIC to a standstill and made its mid-to long-term future uncertain. In other words, political relations between the two Koreas play a crucial role for the success of the KIC. Unfortunately, there are no signs of political change in the North. As with the Najin-Sonbong FETA, the political instability in North Korea, its international isolation and the inflexibility of the communist regime which fears the introduction of a market system as well as the political hostility between the two Koreas will impinge negatively on the development potential and opportunities of the KIC.

References

- Aggarwal, A. 2006: Special Economic Zones: Revisiting the Policy Debate, *Economic and Political Weekly* 41 (43–44): 4533–4536.
- Chae, K. S. 2002: The Future of the Sunshine Policy: Strategies for Survival, *East Asian Review* 14 (4): 3–17.
- Cheng, L. K. and Y. K. Kwan 2000: What Are the Determinants of the Location of Foreign Direct Investment? The Chinese Experience, *Journal of International Economics* 51 (2): 379–400.
- Farole, T. 2011: Special Economic Zones, http://siteresources.worldbank.org/INT/RANETTRADE/Resources/Pubs/SpecialEconomicZones_Sep2010.pdf, accessed on 31 August 2012.
- Jayanthakumaran, K. 2003: Benefit-Cost Appraisals of Export Processing Zones: A Survey of Literature, *Development Policy Review* 21 (1): 51–65.
- Kim, S. and H. Moussawi 2007: A Proposed Korea-U.S. Free Trade Agreement and Kaesong Industrial Complex, *North Korean Review* 3 (1): 59–71.
- Kim, Y. S. 2005: The Gaesong Industrial Park and the Future of Inter-Korean Relations, *International Journal of Korean Studies* 4 (2): 35–62.
- Klingner, B. 2011: *Complaints about North Korean Imports a Smoke Screen for Trade Protectionism*, Background Paper 2559, The Heritage Foundation.
- Koo, B. and C. Nam 2001: South Korea's Sunshine Policy and the Inter-Korean Security Relations, *The Korean Journal of Defense Analysis* 8 (1): 79–101.
- Lee, J. W. 2004: Economic Opening of the Hermit Kingdom: Current Status and Future Tasks on the New SEZs in North Korea, *Journal of International Economic Studies* 8 (2): 121–144.
- Lee, Y. H. 2002: Escaping the Poverty Trap: North Korea's Economic Development Strategies, *East Asian Review* 14 (2): 107–121.
- Levin, N. D. and Y. S. Han 2002: *Sunshine in Korea*, Santa Monica, CA: Rand.

- Li, K., J. Whitwell and S. Yao 2005: A Growth Model for China's Special Economic Zone, *Pacific Economic Review* 10 (4): 439–449.
- Lim, E. C. 2006: *Kaesong Industrial Complex, History, Pending Issues, and Outlook*. Seoul: Haenam Publishing Company.
- Lim, S. H. and K. T. Lim 2006: Special Economic Zones as Survival Strategy of North Korea, *North Korean Review* 2 (2): 47–61.
- Lim, W. H. 2005: North Korea's Economic Futures. Internal and External Dimensions, Paper presented at the Conference on Korea: The East Asian Pivot, New Port, RI, 26–27 August 2004, http://www.brookings.edu/fp/cnaps/events/Lim_20051102.pdf, accessed on 29 August 2012.
- Liu, X., G. K. Heilig, J. Chen and M. Keino 2007: Interactions between Economic Growth and Environmental Quality in Shenzhen, China's First Special Economic Zone, *Ecological Economics* 62 (3): 559–570.
- Makabenta, M. P. 2002, FDI Location and Special Economic Zones in the Philippines, *Review of Urban and Regional Development* 14 (1): 59–77.
- Nam, C. W. 2006: Development Stage Theory and Industrial Growth Patterns: Asian NIEs and Selected Advanced Economies Compared (1980–1995), *International Quarterly for Asian Studies* 37 (3–4): 357–394.
- Nam, C. W. and I. S. Yoo 1999: Najin-Sonbong Free Economic and Trade Area in North Korea: Plans, Problems and Progress, *International Quarterly for Asian Studies* 30 (1–2): 153–170.
- Nam, S. W. 2001: Theory and Practice: Kaesong and Inter-Korean Economic Cooperation, *East Asian Review* 13 (1): 67–88.
- Nanto, D. K. and M. E. Manyin 2011: The Kaesong North-South Korean Industrial Complex, Congressional Research Service, http://www.ncnk.org/resources/publications/CRS_Kaesong_Industrial_Complex_3_11_RL34093.pdf, accessed on 15 August 2012.
- Park, J. S. 2006: Path for Seoul's Sunshine Policy, *The Korea Times*, 5 April.
- Park, S. B. 2004a: The North Korean Economy: Current Issues and Prospects, Paper presented at the Conference of the Association of Korean Studies in Canada, Vancouver, 3–4 October 2003, <http://www1.carleton.ca/economics/ccms/wp-content/ccms-files/cep04-05.pdf>, accessed on 22 August 2012.
- Park, S. S. 2004b: *Analysis of Economic Effects of Kaesong Industrial Complex Construction*, Seoul: The Bank of Korea.
- Peng, D. 2002: Subregional Economic Zones and Integration in East Asia, *Political Science Quarterly* 117 (4): 613–641.
- Schweinberger, A. G. 2003: Special Economic Zones in Developing and/or Transition Economies: A Policy Proposal, *Review of International Economics* 11 (4): 619–629.
- Snyder, S. 2005: South Korea's Squeeze Play, *The Washington Quarterly* 28 (4): 93–106.
- World Trade Organization (WTO) 2010: International Trade Statistics 2010, http://www.wto.org/english/res_e/statis_e/its2010_e/its10_toc_e.htm, accessed on 28 August 2012.
- Yeung, Y. M., J. Lee and G. Kee 2009: China's Special Economic Zone at 30, *Eurasian Geography and Economics* 50 (2): 222–240.

- Yoon, S. 2007: An Economic Perspective of Kaesong Industrial Complex in North Korea, *American Journal of Applied Science* 4 (11): 938–945.
- Winder, J. A. B. 2003: Promoting Economic Cooperation between North and South Korea, in: D. W. Boose et al. (eds.), *Recalibrating the U.S. – Republic of Korea Alliance*, Carlisle, PA: Strategic Studies Institute of the US Army College.
- Zeng, D. Z. (ed.) 2010: *Building Engines for Economic Growth and Competitiveness in China: Experience with Special Economic Zones and Industrial Clusters*, Washington DC: World Bank.

