The Evolution of and Prospects for Economic Relations between the ROK and China

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The Chinese economy has experienced dramatic changes since its adoption of economic reforms in 1978. In the past 26 years, China's GDP has increased at a rate of 9.4% per year and it currently ranks sixth in the world in terms of GDP. Accompanying China's economic reforms was a policy of opening up the domestic market to the outside world. Between 1978 and 2005, on average, China's foreign trade increased by 17% per year, reaching $1,422.5 billion in 2005, which put China in third place worldwide. Its rapid economic growth and gradual open-door policy have turned China into a country with attractive investment opportunities for foreign countries. Foreign direct investment (FDI) in China has increased from a negligible amount in the late 1970s to $60.3 billion in 2005, making China the second-largest recipient of FDI in the world, second only to the United States.

With China's open-door policy, economic relations between the ROK and China have also been promoted since the establishment of a diplomatic relationship between the two countries. The continued involvement of ROK companies in China appears to have contributed to the ROK's trade growth and improved competitiveness, as well as providing the impetus for China's sustained economic growth.

1. Trade between the ROK and China

Since the establishment of a diplomatic relationship between the two countries, trade between the ROK and China has increased rapidly, especially since China's accession to the WTO in 2001. As shown in Table 1, the volume of bilateral trade increased from $2.8 billion in 1990 to $100.5 billion in 2005. During this period, the ROK's exports and imports with China expanded by 85 times and 13 times respectively. In 2005, the ROK exported $61.9 billion of goods to China and imported $38.6 billion of goods from China, giving rise to a trade surplus of $23.3 billion. The ROK's trade surplus has widened in the past decade, with the accumulated surplus reaching $88.6 billion since 1990.

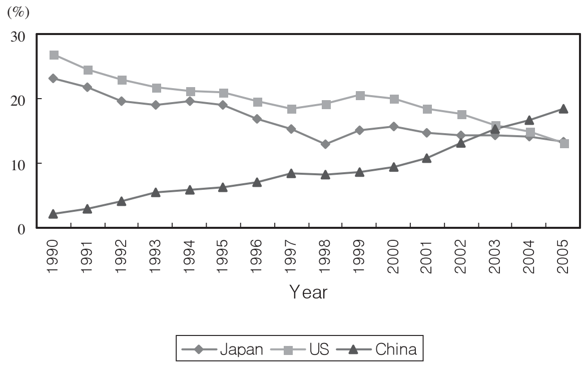
The trade relationship between the ROK and China has improved steadily in terms of the share of bilateral trade as well as the absolute amount. As is evident from Figure 1, the share of China in the ROK's foreign trade has increased from 2.1% in 1990 to 18.4% in 2005, making China the ROK's largest trade partner. Meanwhile, the share of the US and Japan decreased from 26.9% and 26.1% to 13.2% and 13.3% respectively during the same period.

Table 1 Recent Trends in Bilateral Trade Between the ROK and China ($1 million)

Year	Exports	Imports	Surplus	Total Trade
1990	585 (33.7)	2,268 (33.1)	-1,683	2,853
1995	9,144 (47.4)	7,401 (35.5)	1,743	16,545
2000	18,455 (34.9)	12,799 (44.3)	5,656	31,254
2005	61,915 (23.0)	38,648 (37.7)	23,267	100,563

Source: Korea International Trade Association - KOTIS
Note: Numbers in parentheses are growth rates (%)

Figure 1 Share of Three Major Trade Partners in the ROK's Foreign Trade



Source: Korea International Trade Association - KOTIS

Table 2 Major Exports from the ROK to China ($1 million)

	Item	2004	2005
1	Thermionic, cold cathode valves, tubes	3,977 (54.7)	7,147 (79.7)
2	Telecommunications equipment	4,647 (15.7)	5,126 (10.3)
3	Optical instruments and apparatus	2,059 (294.2)	4,377 (112.6)
4	Automatic data processing machines	2,222 (32.4)	3,039 (36.8)
5	Petroleum oils and oils from bituminous minerals	2,469 (58.8)	3,035 (22.9)
6	Motor vehicle parts	1,650 (91.3)	2,598 (57.5)
7	Machinery parts	3,427 (55.2)	2,558 (-25.4)
8	Carboxylic acids and their anhydrides and halides	1,893 (62.7)	2,442 (29.0)
9	Hydrocarbons	2,042 (47.9)	2,383 (16.7)
10	Electrical machinery and apparatus	1,211 (109.4)	1,774 (46.5)

Source: Korea International Trade Association (KOTIS)
Note: Numbers in parentheses are growth rates (%)

Tables 2 and 3 present the ROK's major export and import items with regard to China. As shown in Table 2, the ROK's major export goods include organic chemicals, office machinery and vehicles, telecommunications

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equipment and petroleum products, reflecting the fact that the ROK tends to export intermediate goods that appear to meet China's needs resulting from the rapid growth of exports and investment. On the other hand, the ROK used to mainly import raw materials and textiles from China, but recently the import pattern has been changing such that it imports electrical and telecommunication machinery, and iron and steel from China.

Table 3 Major Imports to the ROK from China ($1 million)

	Item	2004		2005	
1	Electrical machinery and apparatus	1,956	(44.4)	2,409	(23.2)
2	Automatic data processing machines	1,388	(69.9)	1,927	(38.9)
3	Thermionic, cold cathode valves, tubes	1,508	(33.5)	1,838	(21.9)
4	Flat-rolled products of iron or non-alloy steel	895	(443.9)	1,816	(102.8)
5	Telecommunications equipment	1,277	(40.8)	1,653	(29.4)
6	Machinery parts	1,382	(44.3)	1,552	(62.2)
7	Coal (not agglomerated)	1,277	(40.8)	1,460	(5.6)
8	Aluminum	917	(63.6)	1,070	(16.8)
9	Iron and steel bars, rods, angles, shapes and sections	586	(143.0)	942	(60.7)
10	Electrical power machinery and parts	691	(29.3)	915	(32.5)

Source: KOTIS
Note: Numbers in parentheses are growth rates (%)

2. ROK Investment in China

1) Recent patterns

The ROK is one of the China's most important bilateral economic partners in terms of both trade and investment. Between 1992 and 2005, on average, the amount of FDI realized increased by more than 120% per year, reaching $2.6 billion in 2005. In particular, the ROK's FDI into China increased dramatically after the outbreak of the financial crisis in the ROK; accordingly, the share of the ROK's FDI outflows has also increased steadily since 2000.

Table 4 FDI Flows from the ROK to China ($1,000)

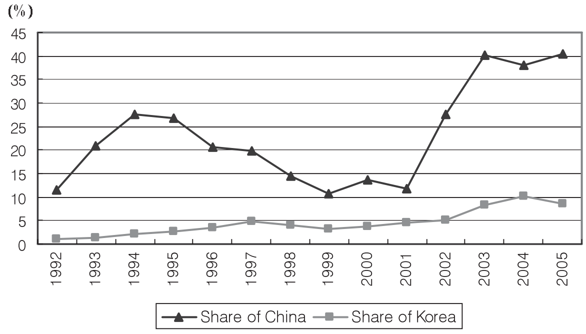
	Contracted		Realized	
Year	Cases	Amount	Cases	Amount
1992	269	223,113	170	141,127
1995	884	1,280,585	751	841,647
2000	914	979,895	775	686,127
2001	1,130	1,000,620	1,038	596,566
2002	1,549	2,083,399	1,375	999,137
2003	1,845	2,788,288	1,683	1,558,543
2004	2,245	3,654,288	2,153	2,217,011
2005	2,307	3,565,174	2,242	2,616,468
Total	15,389	21,350,575	13,499	13,242,571

Source: Export-Import Bank of Korea

As shown in Figure 2, in 2005, China attracted 40.4% of total FDI outflows from the ROK, while the ROK accounted for 8.6% of total Chinese FDI inflows. In an international comparison, China ranked first in the ROK's realized FDI outflows, followed by the US and Japan. The ROK ranked fourth in China's realized FDI inflows, following Hong Kong, the Virgin Islands and Japan.[2]

It is also noteworthy that flows of "contracted" FDI have steadily risen from 1999, suggesting that ROK firms

Figure 2 Share of the ROK (China) in China's (the ROK's) FDI Inflows (Outflows) (%)



Source: Export-Import Bank of Korea

have been registering their intent to invest in China in anticipation of the stable investment environment that is likely to result from China's accession to the WTO.

2) Structure of the ROK's FDI in China

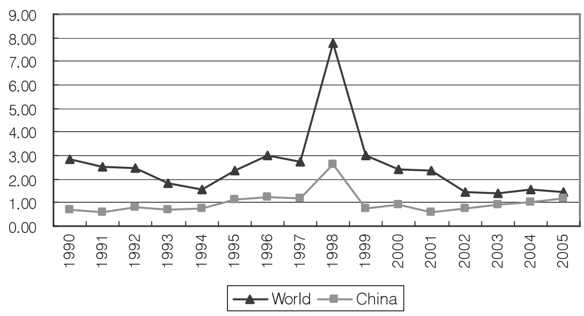
(1) Size of investment.

The main feature of the ROK's FDI in China is that individual investment is relatively small and most capital is concentrated in labor-intensive industries. Between 1996 and 2005, on average, the amount of individual ROK FDI in China was $1 million, which is substantially smaller than average individual ROK FDI outflows worldwide. During this period, more than 40% of investors were small and medium-sized enterprises and the size of individual investments ranged from a low of $274 thousand in agriculture to a high of $3,972 thousand in the communications industry and $2,236 thousand in construction.

(2) Investment by industry

The majority of the ROK's FDI in China was directed toward the manufacturing sector, partly reflecting the relocation of manufacturing facilities from the ROK to China. In 2005, the manufacturing sector accounted for

Figure 3 Recent Trends in the Size of Individual ROK FDI Outflows ($1 million)



Source: Export-Import Bank of Korea

[2] Hong Kong and the Virgin Islands, however, are somewhat illusory in that much of the FDI from these regions is in reality from elsewhere; some of what is listed as Hong Kong and Virgin Islands FDI is, in fact, investment by domestic Chinese or other western countries and Taiwan, which invest in China via Hong Kong intermediaries.

more than 80% of total FDI. However, given the industrial background of most ROK investors and China's reputation as the world's "assembly line", it is not surprising that over 80% of all investment was directed toward the manufacturing sector. In other words, ROK firms tend to concentrate on export-processing activities, and have recently been moving toward the domestic market.

In the manufacturing sector, a large proportion of investment flowed into electrical and communications equipment, transport equipment, basic metals and textile products. In 2005, electrical and communications equipment accounted for 22.1% of the total, with transport equipment and base metals accounting for 19.8% and 10.1% respectively.

On the other hand, although China has extended its open door policy for sectors such as the financial, insurance and telecommunications sectors, investment in the service sector lagged behind, accounting for between 8-10%. Nevertheless the gradual opening of the Chinese service market to foreign firms since China's WTO accession in late 2001 is likely to motivate more ROK firms to discover the Chinese service market.

Table 5　Amount of Individual ROK FDI in China by Industry ($1,000)

	2002	2003	2004	2005	1996-2005
Agriculture, Forestry and Fishing	312	216	366	273	274
Mining and Quarrying	466	1,365	238	3,502	882
Manufacturing	753	990	1,185	1,403	1,045
Construction	6,039	877	1,413	1,067	2,236
Wholesale and Retail Trade	356	818	957	813	791
Transport and Storage	681	4,263	332	1,441	1,459
Communication	99	1,146	139	337	3,972
Finance and Insurance	350	-	-	10	312
Restaurants and Hotels	216	185	202	231	751
Real Estate and Services	541	521	309	544	517
Average for All Industries	727	926	1,030	1,167	1,000

Source: Export-Import Bank of Korea

Table 6　The ROK's FDI in the Chinese Manufacturing Sector ($1,000, %)

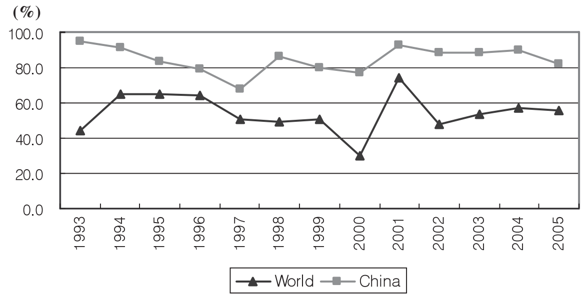
	2003		2004		2005	
	Amount	Share	Amount	Share	Amount	Share
Food, Beverages and Tobacco	38,849	2.7	93,638	4.6	135,379	6.3
Textile and Textile Products	114,057	8.1	243,490	12.0	193,547	9.0
Leather and Footwear	33,013	2.3	38,230	1.9	74,485	3.5
Wood Products	6,394	0.5	12,254	0.6	14,942	0.7
Paper Products and Printing	13,893	1.0	31,907	1.6	13,943	0.6
Chemical and Fuel Products	210,836	14.9	223,367	11.0	195,896	9.1
Non-Metallic Mineral Products	74,386	5.3	78,475	3.9	87,567	4.1
Base Metals	145,905	10.3	155,783	7.7	218,403	10.1
Fabricated Metal Products	73,672	5.2	82,236	4.0	58,244	2.7
Machinery and Equipment	152,648	10.8	228,465	11.2	157,990	7.3
Electrical and Communications Equipment	308,578	21.8	506,873	24.9	476,894	22.1
Transport Equipment	181,311	12.8	240,555	11.8	427,481	19.8
Other Manufacturing	62,979	4.4	98,847	4.9	102,426	4.7
Total	1,416,521	100.0	2,034,120	100.0	2,157,197	100.0

Source: Export-Import Bank of Korea

3) Incentives and obstacles to ROK investment in China

There are three main incentives that drive ROK firms

Figure 4　Share of Manufacturing Investment (%)



Source: Export-Import Bank of Korea

to invest in China. Firstly, looking at the massive share of manufacturing firms among ROK investors, ROK industry has recognized the advantage of using China as a low-cost manufacturing site, especially if the goods produced are exported. Fierce global competition is literally forcing ROK producers to exploit China's relatively low wage costs. Secondly, large ROK conglomerates tend to invest in China in an attempt to exploit the huge domestic consumption market. Thirdly, prior to its WTO accession, China's market potential could only be tapped to a very limited degree, while export-oriented investment was promoted. WTO membership now enables foreign companies to benefit from China's vast appetite for foreign products by providing better and easier access to the Chinese market.

One of the main impediments discouraging involvement in China is the persistent legal uncertainties, reflected not only in a lack of intellectual property rights protection but also in rapidly changing framework conditions and regulatory obstacles. Another problem is a lack of information about consumer structures and preferences, as well as domestic market networking.

Apart from the high cost of legal and other information costs, ROK investors also face high prices for electricity and raw materials, which makes it increasingly difficult to achieve sound profit margins.

Finally, with the increasing attractiveness of the Chinese market, competition is rising, especially in the manufacturing sector, which has received about two-thirds of foreign investment. Barely having any market power, most ROK firms operate in the mid-value segment, in which competition mainly comes from US, Japanese and Taiwanese companies. Moreover, Chinese firms are also emerging as major competitors, demonstrating enormous technological progress.

3.　Is China's Rapid Growth a Big Challenge for the ROK?

Since the initiation of economic reform and opening in 1978, China has become the world's fastest-growing economy, with an average growth rate of 9.4%. As a result, China ranks fourth in the world in terms of GDP, which clearly indicates that China's position has strengthened remarkably.

The rise of China as a major economic power has stimulated a series of changes in East Asia, including in the ROK and Japan. It is substantially reshaping the contours of economic cooperation and the division of labor in this region. In the past, the division of labor in the region had been largely commanded by Japanese capital and technology. However, China's rise, with its huge market and abundant workforce, has recently been directly affecting the expansion of economic cooperation and the intensification of the division of labor in the region.

So far, this region's trade with China has been restricted to vertical intra-industry relations, mainly in the machinery industry. In the future, however, trade with China will be further expanded to encompass other industries in various forms. Asian countries such as the ROK and Japan will relocate many of their labor-intensive manufacturing factories to China. At the same time, Chinese firms are also forecast to enter foreign markets at an accelerating pace, generating a new division of labor structure centered on Chinese companies.

The ROK, in particular, has been greatly exposed to the influence of China in close proximity. The ROK's relationship with China has deepened, with China becoming the ROK's largest trade partner, and the ROK becoming a major investor in China. A robust ROK-China relationship presents both opportunities and challenges for the ROK. For example, China's rise as the "world's factory" and the "world's market" offers a great opportunity for expanding exports based on the complementarities of ROK-China industries. Furthermore, China's openness and the expansion of its market economy as a result of its membership of the WTO are expected to provide numerous advantages to the ROK, thanks to its geographical proximity and cultural affinity.

Nevertheless, one cannot rule out the possible challenges that may be posed by the rise of the Chinese economy. This may be attributable to China, with its higher technology power, entering into fierce competition with the ROK in the global market. In particular, Chinese industries are rapidly enhancing their competitiveness by being able to attract large-scale foreign direct investment and being supported by the priority positioning of science and technology in governmental policies, thereby reducing the ROK-China technology gap. Henceforth, competition between the two nations will be inevitable and most likely to deepen, not only in China's domestic market but also in the global market.

As previously mentioned, the ROK falls within the boundary of the influence of the new order resulting from China's growth. At the same time, it is also one of the pivots in the newly created international division of labor. Therefore, it is of the utmost importance that we appropriately understand the changes resulting from China's rise and how best to devise ways to cope with it.

In the future, the ROK must proactively devise measures to take the best advantage of China's rise as a growth engine for the economy.

Firstly, vertical intra-industry trade centered on China is expected to continue for a significant period of time. Thus, China should be actively utilized as an export platform.

Secondly, in the medium- and short-term, China's competitive pressure will predominantly rely on multinational companies. However, in the long-term it is most likely to come from China's large human capital, steadily and firmly accumulated over the years. Given this fact, it is essential to upgrade industry and strengthen the competitiveness of the ROK's industry. To this end, source technology should be boosted through increased investment in research and human resource development. Moreover, manufacturing competitiveness should be maintained and further bolstered through the promotion of higher added value.

Thirdly, while fostering domestic services, in order to ensure that they can compete with others in advanced economies, we must also not forget the importance of creating a synergy effect between manufacturing and services.

Last, but not least, a pressing need is emerging that requires the ROK to ensure that it is fully prepared for a decrease in import demand from China.

Soon, new alternatives will be available to China, resulting from the expansion of existing markets and the development of new ones. In view of this, the ROK must fully utilize the Chinese market via proactive economic and trade cooperation with China.

Concurrently, the ROK must also pursue a balanced foreign trade policy through free trade agreements with advanced economies such as the US.

As such, the rise of China's economy has brought about not only various opportunities, but also challenges to the ROK, not to mention the economy of Asia as a whole. Yet, no country can afford to miss the great opportunities that China offers. In this state of mixed blessings, it is truly important to accurately understand the essentials of China's rise and make a rational, intelligent judgment of their implications.

References

Baldwin, R.E. and A.J. Venables (1995), "Regional Economic Integration" in Grossman, G.M. and K. Rogoff (eds.) *Handbook of International Economics*. Vol. III. Elsevier. Amsterdam: North Holland, 1597-1644.

Cheng, Leonard K and Yum 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.

Jee, Mansoo et al (2004), "Korean Firms Invested in China: Survey of Management and Implications", KIEP Policy Analysis 04-14.

Kang, Sung Jin and Hongshik Lee (2004), "Location choice of multinational companies in China: Korean and Japanese companies", KIEP Working Paper 04-13.

Lee, Changkyu and Inkoo Lee (2006), "The rise of China and Its Implications for Korean Economy", *Taiwanese Journal of WTO Studies*, Volume 4, 155-188.

Lee, Hongshik et al (2005), "Economic Effects of a Korea-China FTA and Its Policy Implications", KIEP Policy Analysis 05-03.

Yeyati, Eduardo Levy, Ernesto Stein, and Christian Daude, 2003, "Regional Integration and the Location of FDI," Working Paper #492, Inter-American Development Bank.