Korean Direct Investment in China: Current Problems and Future Prospects*

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I. Introduction

Although very close geographically, Korea and China began their economic transactions only since the early 1980s when China entered the era of the reform and open-door policy. In the initial phase of interaction, indirect trade via Hong Kong was the dominant form. In early 1991, trade representatives with consular functions were established, under the titles of semi-official KOTRA (Korea Trade Promotion Corp.) and CCOIC (China Chamber of International Commerce). Then, in February 1992, the trade agreement was signed by these semi-official bodies, functioning as an inter-governmental agreement. This agreement put Korean exporters on equal competitive footing, getting rid of discriminatory higher tariffs which had been applied to Korean products.(1) In May 1992, the investment protection agreement was signed with a similar format. Finally, the two countries established diplomatic relations in August, 1992, making the aforementioned agreements official. Some irregularities,

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⁽¹⁾ Korea-China bilateral trade reached US\$ 3 billion in 1988, US\$ 5.8 billion in 1991, and US\$ 8.2 billion in 1992. In 1992, Korean exports to China were US\$ 4.49 billion, showing 89% increase over the previous year, while Korean imports from China were US\$ 3.73 billion showing an 8% increase over the previous year.

however, such as the absence of regular direct flight route between the two countries, still exist. (2)

Korean direct foreign investment (DFI) in China has a very short history. Korea's first investment in China was realized in 1985, with the form of a Hong Kong company, which was an overseas subsidiary of a Korean firm, establishing a factory to produce stuffed toys in China. Since then, a few cases of Korean investment occured indirectly through third countries. But the real momentum was gained in 1988, when the two provinces of China, *Shandong* and *Liaoning*, allowed Korean direct investment into the provinces and sent their delegations to Seoul to promote Korean investment. Since then, Korean direct investment without a third country intermediary became feasible.

Korean direct investment in China showed a remarkable increase since the late 1980s as Table 1 shows. By the end of 1994, 1,042 cases of Korean investment in China of 960 million US dollars were approved by the Bank of Korea. (3) Of the approved investments, 465 million US dollars for 646 cases had actually been invested by the end of 1993. (4)

⁽²⁾ However, regular charter flights using detour routes have been opened between Seoul and the two Chinese cities, Shanghai and Tianjin, since early 1992.

⁽³⁾ In addition, there have been some Korean investments in China which were not included in the aforementioned statistics. The first type is approved indirect investment, which is implemented through the subsidiary in the third country (mainly Hong Kong). There were about forty investment projects approved by the end of 1992. The second type is unofficial investment which does not get approval from the Korean authorities. This type of investment usually involves Korean expatriates living in other countries such as the U.S., Japan, etc. Although the exact magnitude of these unofficial investments is difficult to estimate, it is conjectured to be unnegligible. According to the author's on-site interviews with the managers of such enterprises, the nature of these projects is not much different from the officially-conducted ones. Also, as the Korea-China formal relationship began to improve, the unofficial investment seemed to lose its significance. In this way, representativeness of official investment is not damaged much.

⁽⁴⁾ According to the Korea's regulations, the approved amount is to be actually invested within one year, unless special condition is attached to

Especially since 1992 when the two countries established diplomatic relations, Korean direct investment in China showed a dramatic increase. Total approved cases was 269 in 1992, and it jumped to 629 cases in 1993. Both the approved investment and the actual investment in 1993 far exceeded the corresponding total of the previous years and China ranked first among the recipients of Korean FDI on the approval basis since 1992. In 1993, Korean DFI in China accounted for more than half of the whole Korean outward investment in terms of the number of DFI cases (see table 1).

It is remarkable that such rapid growth in economic interaction between the two countries has been achieved. As a matter of fact. China has many attractive conditions as a site for foreign direct investment. First of all, the vast potential of China's market has always been the major element attracting foreign direct investment. As the large economy with 1.2 billion people has shown an economic

Table 1. Flow of Korean Direct Investment in China (number of cases, 1000 US dollars)

| | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | Cumulative Balance |
|----------------|-------|-------|--------|--------|---------|---------|-----------------------|
| Approval | | | | | | | |
| # of cases | 2 | 12 | 38 | 112 | 269 | 629 | 1,042 |
| | | | (7.4) | (20.8) | (42.6) | (59.9) | (29.9) |
| US\$ amount | 3,400 | 9,700 | 54,493 | 84,721 | 221,886 | 622,400 | 960,000 |
| | | | (3.4) | (5.3) | (18.3) | (33.2) | (13.5) |
| Actual Investm | ent | | | | | | |
| # of cases | | 7 | 23 | 69 | 171 | 377 | 646 |
| | | | (6.8) | (15.2) | (34.2) | (55.3) | (23.7) |
| US\$ amount | | 6,360 | 15,974 | 42,468 | 141,161 | 262,400 | 465,000 |
| | | | (1.7) | (3.8) | (11.3) | (20.9) | (8.6) |

^{*}These statistics do not include the Korean investment in China made via the third country.

Source: Bank of Korea

^{**}The figures in parentheses show the percent share in total Korean outward investment.

growth of over 9% per annum for the last 14 years and its opening to the outside world has progressed, China's market potential is becoming increasingly realistic to foreign investors. The abundant supply of low-cost labor in China is another main attractive point. The wage level of ordinary workers in China is estimated to be about 10-20% of the corresponding figures in Korea. Enormous low-cost labor is a very important element, especially to the investors from the NIEs (Newly Industrialized Economies) which are in the process of the structural change from the labor-intensive to capital- and technology-intensive industries.

In addition, China has other merits in her investment environment attractive to Korean investment in particular. Its geographic proximity and cultural similitude are also positive aspects of China which Korean investors recognize. The potential advantages of geographic proximity have not vet been fully realized due to insufficient transportation routes, and cultural similarities are not as eminent as casual observers might conjecture. Furthermore, the very existence of two million ethnic Koreans who live in China and can communicate using the Korean language, provides another incentive for Korean investment. These elements are not minor considerations in deciding the location of foreign direct investment, because such factors can reduce costs in managing overseas investment projects. The massive investments in Southern China from Hong Kong and Taiwan are clear evidence that shows the importance of these elements.

This paper aims at analyzing Korean direct foreign investment in China. In section 2, we first discusses the general pattern of outward direct foreign investment by Korean firms in the world, ASEAN, and China. We compare Korean DFI in China with the overall pattern of Korean outward DFI and DFI in ASEAN countries to find out motivations of Korean firms. Section 3 discusses geographical distribution of Korean DFI in China and other features of Korean DFI such as size and share ratio

distribution. Section 4 discusses what are the current problems facing Korean DFI in China. The paper concludes with a summary and brief discussion of the prospects.

II. Korean Direct Foreign Investment in the World, ASEAN, and China

Korean Direct Foreign Investment in the World

The motivations and patterns of direct foreign investment by developing country firms have been studied since the early 1980s (Lall 1983; Kumar and McLeod, 1981). Since the late 1980s, a rapidly increasing volume of DFI by the newly industrializing economies has attracted further academic interest in this issue. This new phenomenon is mainly explained by ongoing structural adjustments in those economies (Lall 1991; Lee 1990; Lee and Lee 1992; Lee 1994). Structural changes in the Korean economy in the 1980s prompted outward foreign investment by Korean firms. According to table 2, Korean outward DFI has continued to increase in the 1990s. By the end of 1992, the cumulative DFI cases were 1,414 cases, which means that about 2 percent of Korean manufacturing firms conducted outward DFI. The rank of sectoral DFI intensity as measured by the ratio of cumulative DFI cases to the total number of firms in each sector runs from the first leather & fur, miscellaneous goods, industrial chemical, footwear, apparel, electronics, glass product, other chemical, to the ninth pottery & china sector and so on. (5)

These sectors can be grouped into two. The first group is the labor-intensive sectors which have generated strong flow of outward DFI. Most strongly labor-intensive sectors in

⁽⁵⁾ As a matter of fact, the petroleum sector shows the highest (33.3%) DFI intensity. However this sector is not listed here. This sector is special because there exist a very few number of firms, only 12. In other words, 4 outward DFI cases have been observed out of the total 12 companies present in that sector.

Table 2. Trends in Korean Outward Investment in Manufacturing (1986-92, number of case approved)

| | | (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | Section of the section of | | 13 3 3 5 5 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | | |
|-----------------------|------|---|---------------------------|-------|--|--|--|
| Sector Names & Codes | 1986 | 1987 | 1988 | 1989 | 1990 | | |
| Food 311 | 0 | 0 | 7 | 6 | 14 | | |
| Beverage 313 | 0 | 0 | 1 | 1 | 1 | | |
| Tobacco 314 | 0 | 0 | 0 | 0 | 0 | | |
| Textile 321 | 0 | 0 | 3 | 9 | 13 | | |
| Apparel 322 | 13 | 19 | 18 | 43 | 55 | | |
| Leather & Fur 323 | 0 | 1 | 3 | 15 | 23 | | |
| Footwear 324 | 0 | 1 | 6 | 9 | 7 | | |
| Wood Product 331 | 0 | 4 | 4 | 16 | 0 | | |
| Furniture 332 | 1 | 0 | 0 | 0 | 2 | | |
| Paper Product 341 | 0 | 0 | 2 | 1 | 2 | | |
| Printing 342 | O | 1 | 1 | 1 | 0 | | |
| Indust. Chemical 351 | 0 | 2 | 2 | 8 | 16 | | |
| Other Chemical 352 | O | 1 | 2 | 7 | 10 | | |
| Petro Refinery 353 | 1 | 0 | 0 | O | 0 | | |
| Petro Product 354 | 0 | 0 | 0 | 1 | 0 | | |
| Rubber Product 355 | 0 | 0 | 3 | 8 | 5 | | |
| Plastic Product 356 | 2 | 1 | 5 | 5 | 13 | | |
| Pottery & China 361 | O | 0 | 2 | 1 | 2 | | |
| Glass Product 362 | O | 0 | 0 | 2 | 0 | | |
| Oth. Non-metal 369 | 0 | 1 | 2 | 2 | 4 | | |
| Basic Metal 371 | 0 | 1 | 0 | 4 | 2 | | |
| Non-ferr. Metal 372 | 0 | 0 | 0 | 4 | 4 | | |
| Fabricated Metal 381 | 2 | 0 | 1 | 3 | 11 | | |
| Non-elec, Mchin. 382 | 0 | 1 | 1 | 4 | 5 | | |
| Elec. & Electron. 383 | 5 | 7 | 12 | 25 | 47 | | |
| Transport Equip. 384 | 1 | 0 | 1 | 1 | 1 | | |
| Medical & Scient. 385 | 0 | 0 | 2 | 3 | 5 | | |
| Miscellaneous 390 | 9 | 1 | 13 | 29 | 30 | | |
| Sum | 25 | 41 | 91 | 208 | 272 | | |
| Sector Names & Codes | 1991 | 19 | 92 | Total | Intensity(%) | | |
| Food 311 | 12 | 2 | :3 | 62 | 1.56 | | |
| Beverage 313 | 0 | | 1 | 4 | 0.59 | | |
| Tobacco 314 | 0 | | 0 | 0 | 0.00 | | |
| Textile 321 | 23 | 3 | 88 | 86 | 1.09 | | |
| Apparel 322 | 47 | 9 | 14 | 289 | 4.45 | | |
| Leather & Fur 323 | 21 | 3 | 86 | 99 | 7.67 | | |
| Footwear 324 | 9 | | 4 | 36 | 5.11 | | |
| Wood Product 331 | 12 | 1 | 3 | 49 | 2.46 | | |
| Furniture 332 | 4 | | 6 | 13 | 0.75 | | |
| Paper Product 341 | 7 | | 8 | 20 | 1.07 | | |
| | | | | | | | |

| Sector Names & Codes | 1991 | 1992 | Total | Intensity(%) |
|-----------------------|------|------|-------|--------------|
| Printing 342 | 2 | 1 | 6 | 0.21 |
| Indust. Chemical 351 | 9 | 13 | 50 | 5.28 |
| Other Chemical 352 | 2 | 4 | 26 | 2.61 |
| Petro Refinery 353 | 1 | 2 | 4 | 33.33 |
| Petro Profuct 354 | 1 | 0 | 2 | 0.57 |
| Rubber Product 355 | 7 | 4 | 27 | 1.70 |
| Plastic Product 356 | 4 | 6 | 36 | 1.04 |
| Pottery & China 361 | 3 | 4 | 12 | 2.48 |
| Glass Product 362 | 3 | 4 | 9 | 2.69 |
| Oth. Non-metal 369 | 9 | 12 | 30 | 1.14 |
| Basic Metal 371 | 4 | 6 | 17 | 2.13 |
| Non-ferr. Metal 372 | 3 | 5 | 16 | 2.38 |
| Fabricated Metal 381 | 19 | 21 | 57 | 1.04 |
| Non-elec. Machin. 382 | 10 | 12 | 33 | 0.56 |
| Elec. & Electron. 383 | 48 | 62 | 206 | 3.37 |
| Transport Equip. 384 | 1 | 0 | 5 | 0.20 |
| Medical & Scient. 385 | 2 | 7 | 19 | 1.73 |
| Miscellaneous 390 | 55 | 73 | 201 | 7.15 |
| Sum | 318 | 459 | 1,414 | 2.15 |

Source: Author's Data Base compiled from the raw data supplied by Bank of

The Notes: The number of firms counts only firms present in each Korean manufacturing sectors in 1989. Intensity is defined as the total cumulative investment cases divided by the number of firms in each sector.

Korean manufacturing which experienced the major increase of unit labor cost and hence profitability, generated outward investment seeking cheap labor mostly in China and ASEAN. The second group includes chemicals and electronics sectors, which seem to have different reasons for outward DFI. For the main motivation to go abroad of these sectors is to sell in local markets. These sectors have not experienced such a major decline in profitability as the strongly laborintensive sectors. However, they generated strong outward investment flows into ASEAN and Western advanced countries (Lee 1994).

Korean outward investment from labor-intensive sectors seems to be based on not only location advantage (cheap wage) of host countries but also some ownership advantage (competitiveness in medium-quality goods) of Korean producers. This can be seen not only from a high correlation of DFI intensity with RCA index but also from a high correlation of RCA with Korean share ratio in investment. ⁽⁶⁾ In fact, those sectors showing highest RCA are footwear, apparel, leather & fur and textile, and in these sectors the ratio of Korean shares is the highest among 28 manufacturing sectors with an average of about 80 percent (see table 15 in Lee, 1994). These are the sectors in which Korean products must have certain ownership advantage as evidenced by good performance in world markets. These sectors have dominated Korean investment in China, and ASEAN, respectively, and Korean producers felt the less need to form a joint venture with foreign partners and in many cases took the 100 percent ownership.

In contrast, although the sectors of industrial and other chemicals has generated intense outward DFI flows, RCA's are very low in these sectors and Korean share ratios are also low. Our interpretation is that Korean DFI from these sectors is not based on any strong ownership advantage of Korean products, however it went to abroad (including OECD countries) to defend its markets against rising protectionism or learn from its foreign partners. With weak ownership advantage, the role of foreign partner is more important than otherwise, so the Korea share ratio tends to be low. This kind of interpretation partly fits the case of electronics sector, too; it has relatively high RCA and low Korean share ratio.

Considering that Korean DFI in Western Europe and North

⁽⁶⁾ Lee (1994) tried regression analysis on the determinant of the Korean share ratio in investment project. With a dummy for automobile sector which is a exceptional case, it shows a nice fit with RCA as an explanatory variable for the Korean share ratio variable. To the extent that RCA index represents ownership advantage of Korean products, the results can be taken as implying that the more ownership advantage Korean investors have, the less need to share management with foreign partners or the more likeliness to take the form of wholly Korean-owned ventures.

Korean Invesment in ASEAN-4 Countries

Table 3 shows the trend of Korean investment cases in the ASEAN-four countries of the Philippines, Indonesia, Malaysia, and Thailand from 1987 to 1992. We have divided the period into the two sub-periods since the early and later periods show different patterns in terms of the sectoral distribution of investment. The last row in the table clearly shows that Korean investment in ASEAN reached a peak in 1990 and then started to decline, at least in terms of the absolute number of DFI cases.

Table 4 also presents the sectoral DFI intensity as measured by the number of cases of Korean DFI divided by the total number of firms in each Korean manufacturing subsector. During the first period, the DFI-prone sectors included the following 10 sectors: apparel, leather & fur, footwear, wood products, industrial chemical, other chemical, rubber products, pottery & china, electric & electronical products, and miscellaneous products. These DFI-prone sectors can be classified in terms of their different motivations to go abroad: cheap labor seeking, market-seeking, raw material-seeking investment, and the special case of the footwear sector. The distribution of sectors according to motivations is based on a priori reasoning as well as DFI-related stories in each sector.

First, cheap labor-seeking investment includes apparel, leather & fur, rubber products, pottery & china, and miscellanous products. The common feature of these sectors is that they are all strongly labor-intensive sectors experiencing an above-average increase in unit wage cost

⁽⁷⁾ Jun (1987) also took the nature of Korean investment in advanced countries as "defensive" and "premature."

Table 3. Trends in Korean Investment in ASEAN-4 Country (number of cases approved)

A. the First Period (87-90)

| Sector | 1987 | 1988 | 1989 | 1990 | Subtotal | Intensity(%) |
|--------|------|------|------|------|----------|--------------|
| 311 | 0 | 0 | 1 | 4 | 5 | 0.13 |
| 313 | 0 | O | 1 | 1 | 2 | 0.29 |
| 314 | O | 0 | O | 0 | 0 | 0.00 |
| 321 | O | 1 | 8 | 8 | 17 | 0.22 |
| 322 | 3 | 5 | 14 | 29 | 51 | 0.78 |
| 323 | O | 1 | 7 | 15 | 23 | 1.78 |
| 234 | 1 | 5 | 7 | 1 | 14 | 1.99 |
| 331 | 0 | 2 | 3 | 8 | 13 | 0.65 |
| 332 | 0 | 0 | 0 | 2 | 2 | 0.12 |
| 341 | 0 | O | 1 | 1 | 2 | 0.11 |
| 342 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 351 | 0 | 2 | 5 | 11 | 18 | 1.90 |
| 352 | 1 | 0 | 3 | 6 | 10 | 1.00 |
| 353 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 354 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 355 | 0 | 2 | 6 | 2 | 10 | 0.63 |
| 356 | 0 | 2 | 3 | 10 | 15 | 0.43 |
| 361 | 0 | 1 | 0 | 1 | 2 | 0.41 |
| 362 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 369 | 0 | 0 | 0 | 2 | 2 | 0.08 |
| 371 | 0 | 0 | 2 | 1 | 3 | 0.38 |
| 372 | 0 | 0 | 0 | 2 | 2 | 0.30 |
| 381 | O | 1 | 0 | 7 | 8 | 0.15 |
| 382 | 0 | 0 | 1 | 0 | 1 | 0.02 |
| 383 | 1 | 8 | 8 | 25 | 42 | 0.69 |
| 384 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 385 | 0 | 2 | 3 | 2 | 7 | 0.64 |
| 390 | 0 | 8 | 18 | 20 | 46 | 1.64 |
| Sum | 6 | 40 | 91 | 158 | 295 | 0.45 |

B. the Second Period (91-92)

| Sector | 1991 | 1992h | 1992 | Subtotal | Intensity(%) | Firm No's |
|--------|------|-------|------|----------|--------------|-----------|
| 311 | 1 | 1 | 3 | 2 | 0.05 | 3,981 |
| 313 | 0 | 0 | 0 | 0 | 0.00 | 683 |
| 314 | 0 | 0 | 0 | 0 | 0.00 | 21 |
| 321 | 6 | 7 | 8 | 13 | 0.17 | 7,858 |
| 322 | 10 | 5 | 8 | 15 | 0.23 | 6,497 |
| 323 | 2 | 4 | 5 | 6 | 0.47 | 1,290 |
| 324 | 3 | 1 | 1 | 4 | 0.57 | 704 |

| Sector | 1991 | 1992h | 1992 | Subtotal | Intensity(%) | Firm No's |
|--------|------|-------|------|----------|--------------|-----------|
| 331 | 6 | 0 | 2 | 6 | 0.30 | 1,994 |
| 332 | 2 | 1 | 1 | 3 | 0.17 | 1,727 |
| 341 | 3 | 1 | 3 | 4 | 0.21 | 1,876 |
| 342 | 1 | 0 | 0 | 1 | 0.03 | 2,864 |
| 351 | 7 | 1 | 4 | 8 | 0.84 | 947 |
| 352 | 1 | 0 | 0 | 1 | 0.10 | 998 |
| 353 | 1 | 1 | 2 | 2 | 16.67 | 12 |
| 354 | 1 | 0 | 0 | 1 | 0.28 | 352 |
| 355 | 5 | 3 | 3 | 8 | 0.51 | 1,584 |
| 361 | 1 | 1 | 1 | 2 | 0.06 | 3,466 |
| 356 | 1 | 0 | 1 | 1 | 0.21 | 483 |
| 362 | 1 | 1 | 1 | 2 | 0.60 | 335 |
| 369 | 5 | 2 | 3 | 7 | 0.27 | 2,626 |
| 371 | 1 | O | 2 | 1 | 0.13 | 797 |
| 372 | 0 | 0 | 0 | 0 | 0.00 | 671 |
| 381 | 12 | 5 | 5 | 17 | 0.31 | 5,463 |
| 382 | 4 | 4 | 5 | 8 | 0.14 | 5,912 |
| 383 | 21 | 3 | 9 | 24 | 0.39 | 6,120 |
| 384 | 0 | 0 | 0 | 0 | 0.00 | 2,511 |
| 385 | 1 | 0 | 2 | 1 | 0.09 | 1,100 |
| 390 | 15 | 5 | 12 | 20 | 0.71 | 2,812 |
| Sum | 111 | 46 | 81 | 157 | 0.24 | 65,684 |

Notes: See table 2 for sector code explanations.

ASEAN-4 countries are the Philippines, Indonesia, Malaysia, Thailand. The column, 1992h, counts only up to the end of June 1992. Subtotal in B is the sum of the cases in 1991 and 1992h. The number of firms counts only firms exisiting in each Korean manufacturing sector in 1989. Intensity is defined as total cumulative investment cases divided by the number of firms in each sector.

Source: Author's Data Base compiled from the raw data supplied by Bank of Korea

and a decline in capital profitability. According to the IITM survey (1991), in about 61 percent (68 out of 111 cases) of Korean DFI cases in the ASEAN-4 countries, Korean firms did not participate in the local market. The general pattern was that the more labor-intensive the DFI in a hosting country, the smaller the share of the local market in total market outlets. For instance, in the case of Korean DFI in the Philippines, which attracted the most labor-intensive

DFI, the share of the local Philippine market is the lowest.

Second, there is primarily market-seeking (and, maybe, secondarily cheap labor-seeking) investment, as in the cases of industrial and other chemicals, electrical and electronic products. These are capital-intensive or marginally laborintensive sectors which did not experience a major decrease in its capita profitability. Classification of these sectors as market-seeking DFI is based on information about the nature of the DFI as revealed in surveys. For instance, according to the KEIB survey (1992), the Korean DFI firms in Asia with a high local market sales ratio are industrial chemicals and cement. The survey also identified the electric and electronic sectors as primarily market-seeking DFI although this market oriententation is clearer in the case of the OECD region. Among ASEAN countries, Malaysia attracted more capital-intensive and less labor-intensive Korean DFI than other ASEAN countries. Korean DFI in Malaysia is in chemicals, electric and electronic goods (IITM 1991, p.95), and the share of local sales is high.

Third, there is one case of raw material-seeking investment, the wood product sector. Wood product is a marginally labor-intensive sector but did not experience either a major increase in unit wage cost or a major decrease in capital profitability. Thus, although cheap labor in Asia can be an additional attraction, it does not seem to be a primary motivation. Wood resources in the hosting countries seem to be the primary attraction.

Fourth, the case of footwear is special. It is a strongly labor-intensive sector, but it showed neither a major increase in unit wage cost nor a decrease in capital profitability at least until 1989 (although the situation turned into a more serious crisis in 1991 and 1992). (8) Thus,

⁽⁸⁾ The story of DFI in the footwear industry is special. This sector is one of those sector where outward DFI began earlier than in other industries. The peak of outward DFI from footwear industry was 1989. However, the "outward" boom resulted in the so-called "excessive competition" among Korean investors; for instance, Indonesia attracted 3 Korean footwear

outward DFI by the Korean footwear industry during these years should be understood as "aggressive," not defensive, DFI based on the strong ownership advantage of advanced production technology.

The pattern of Korean DFI in ASEAN during the second period (1991-1992) is different from that of the first period. As seen in table 4, the absolute decline in the number of cases is mostly concentrated in the labor-intensive sectors of apparel, leather goods, footwear, and miscellaneous manufacturing, as well as in the market-motivated sectors of industrial and other chemicals and electronics sectors. Those sectors which are now attracting more Korean DFI and also gaining in terms of DFI intensity include: petroleum products, glass products, non-ferrous metal products, fabricated metal products, and machinery and equipment industries.

Korean Investment in China

Table 4 shows sectoral distribution of Korean investment in China from 1988 to 1992 (approval basis). Dividing these case numbers by the total number of firms in each sector, we attempt to measure the tendency to go abroad. According to the DFI-intensity column, Korean investment in China concentrated in (beginning with the sectors showing the highest intensity) leather & fur, miscellaneous products (toys, etc.), pottery & china, apparel, footwear, glass

investors in 1988 and 8 in 1989. With the declining domestic footwear export volumes and rising worry about de-industrialization in the Korean footwear industry, the Korean government designated footwear as a DFI-restricted industry and as an object of "industry rationalization" (Ministry of Commerce, 1992; KEIB 1992). Due to these moves, outward DFI from footwear suddenly dropped and domestic exports increased again. The perception was that the Korean footwear industry did not need to go abroad because it could still maintain competitiveness. As a matter of fact, many of those firms are said to have come back to the home country because domestic production have proved to be still competitive and they are disappointed at the low productivity of foreign workers.

Table 4. Trends in Korean Investment in China, 1987-92 (number of cases approved)

| Sector | 1988 | 1989 | 1990 | 1991 | 1992h |
|--------|------|--------|--------|--------------|---------|
| 331 | 1 | 1 | 5 | 6 | 4 |
| 314 | 0 | 0 | 0 | 0 | 0 |
| 313 | 0 | 0 | 0 | 0 | 0 |
| 321 | 0 | 0 | 2 | 7 | 11 |
| 322 | 0 | 0 | 3 | 19 | 26 |
| 323 | 0 | 2 | 3 | 10 | 13 |
| 324 | 0 | O | 1 | 4 | 0 |
| 331 | 0 | 0 | 3 | 3 | 2 |
| 332 | 0 | 0 | 0 | 2 | 2 |
| 341 | 0 | 0 | 0 | 2 | 2 |
| 342 | 0 | О | 0 | 0 | 0 |
| 351 | 0 | 1 | 0 | 0 | 0 |
| 352 | O | 1 | 1 | 0 | 1 |
| 353 | 0 | 0 | 0 | 0 | 0 |
| 354 | 0 | 0 | 0 | 0 | 0 |
| 355 | 0 | 0 | 2 | 0 | 0 |
| 356 | 1 | 0 | 1 | 0 | 1 |
| 361 | 0 | 1 | 0 | 0 | 0 |
| 362 | O | 1 | 0 | 1 | 0 |
| 369 | 0 | 0 | 1 | 1 | 1 |
| 371 | 0 | 0 | 1 | 1 | 0 |
| 372 | 0 | 0 | 0 | 0 | 0 |
| 381 | 0 | 0 | 1 | 4 | 4 |
| 382 | 0 | 0 | O | 4 | 2 |
| 383 | 0 | 1 | 3 | 11 | 10 |
| 384 | O | 0 | 1 | 0 | 1 |
| 385 | 0 | 0 | 0 | 1 | 0 |
| 390 | 0 | 2 | 4 | 26 | 22 |
| Sum | 2 | 10 | 32 | 102 | 102 |
| Sector | 1992 | Total1 | Total2 | Intensity(%) | Firm No |
| 331 | 15 | 17 | 28 | 0.4 | 3,981 |
| 314 | 1 | 0 | 1 | 0.0 | 683 |
| 313 | O | 0 | 0 | 0.0 | 21 |
| 321 | 18 | 20 | 27 | 0.3 | 7,858 |
| 322 | 53 | 48 | 75 | 0.7 | 6,497 |
| 323 | 24 | 28 | 39 | 2.2 | 1,290 |
| 324 | 1 | 5 | 6 | 0.7 | 704 |
| 331 | 10 | 8 | 16 | 0.4 | 1,994 |
| 332 | 4 | 4 | 6 | 0.2 | 1,727 |
| 341 | 4 | 4 | 6 | 0.2 | 1,876 |

| Sector | 1992 | Total1 | Total2 | Intensity(%) | Firm No's |
|--------|------|--------|--------|--------------|-----------|
| 342 | 0 | 0 | 0 | 0.0 | 2,864 |
| 351 | 4 | 1 | 5 | 0.1 | 947 |
| 352 | 3 | 3 | 5 | 0.3 | 998 |
| 353 | 0 | 0 | 0 | 0.0 | 12 |
| 354 | 0 | 0 | 0 | 0.0 | 352 |
| 355 | 0 | 2 | 2 | 0.1 | 1,584 |
| 356 | 2 | 3 | 4 | C.1 | 3,466 |
| 361 | 2 | 1 | 3 | 0.2 | 483 |
| 362 | 3 | 2 | 5 | 0.6 | 335 |
| 369 | 8 | 3 | 10 | 0.1 | 2,626 |
| 371 | 3 | 2 | 5 | 0.3 | 797 |
| 372 | 3 | 0 | 3 | 0.0 | 671 |
| 381 | 11 | 9 | 16 | 0.2 | 5,463 |
| 382 | 5 | 6 | 9 | 0.1 | 5,912 |
| 383 | 32 | 25 | 47 | 0.4 | 6,120 |
| 384 | 1 | 2 | 2 | 0.1 | 2,511 |
| 385 | 1 | 1 | 2 | 0.1 | 1,100 |
| 390 | 47 | 54 | 79 | 1.9 | 2,812 |
| Sum | 255 | 248 | 501 | 0.48 | 65,684 |

Source: Author's Data Base compiled from the raw data supplied by the Bank of Korea.

Notes: See table 2 for sector code explanations. The column, 1992h, counts only up to the end of June 1992. Totall is the sum of cases up to the first half of 1992, and total2 is the sum of cases up to the end of 1992. The number of firms counts only firms present in each Korean manufacturing sectors in 1989. Intensity is defined as the total cumulative investment cases divided by the number of firms in each sector.

products, food products, wood product, and electronics industries. In terms of the absolute number of cases, the sectoral order runs from miscellanous goods, apparel, leather & fur, electronics, textiles, to food products.

It is clear that DFI intensive sectors correspond to labor-intensive sectors. Compared with the case of Korean investment in ASEAN, there are fewer local market-motivated investments in China, due to the closed nature of China's domestic market. As a matter of fact, DFI intensity is very low in the chemical and other chemical industries and is at an average level in the electrical and electronic industries. Such a pattern is in contrast to that of Korean investment in

ASEAN where both cheap labor and local market-seeking DFI are observed.

Thus, we can say that Korean investment in China is single-factor dominated, namely cheap-labor seeking, export-oriented production for the world maket. Whether or not and how soon the pattern of China DFI will change to resemble the pattern of Korean DFI in ASEAN remains to be seen. It should be noted that the rise of China as a site for labor-intensive Korean DFI is one of the most important reason for the recent decline of labor-intensive DFI in ASEAN.

Most of the Korean investors in labor intensive sectors used to be (or still are) OEM suppliers to the overseas market and possess production technology and exporting know-how in these industries. But they have found it difficult to maintain competitiveness in the world market due to increasing labor costs in Korea accompanied by frequent labor disputes and the shortage of simple labor. Responding to the decline in he Korean business environment, they tend to move the production site overseas to survive. Many of them find China as a good site for overseas investment offering relatively low "cost of foreignness." Typically, they import the equipment and key raw materials, process them in China using Chinese workers, and export to the overseas market. That is, what they need in China is simply the factory site, labor force to produce, and trade-related services. This type of investment projects is mostly small scale, made by SMFs in Korea. They tend to be located in coastal areas with a port nearby, and prefer the form of wholly foreign owned enterprise. (9)

Although investment projects in labor-intensive sectors are dominant, there are emerging numbers of Korean investments aiming at the domestic Chinese markets. These investors see not only the vast potential of China's domestic

⁽⁹⁾ We can list Qingdao, Yantai, and Weihai in Shandong province, Yingkou and Dalian in Liaoning province, Tianjin, and Shenzhen as the major sites for this type of Korean investment.

market in the long run, but also the strength of the present market. (10) Most of them are large or medium size enterprises holding specific technological advantages. The investment scale also tends to be large with longer time horizon. This type of investment projects tends to take the form of joint venture to solicit help in marketing and raw material sourcing from the Chinese partner. They are mostly located in areas with substantial market size and an industrial base in related sectors.(11) In addition to these directly marketoriented investments, there are many investment projects which are currently export-oriented or non-manufacturing based but seek information and opportunity to expand their business area to the domestic market.

III. Other Aspects of Korean Investment in China

Geographic Distribution

Table 5 shows the geographic distribution of Korean investment on China. Korean investments are geographically concentrated on two major regions, namely the Bohai Rim region and the northeast region. Shandong and Liaoning, especially, have been the most popular locations for Korean investments, with 144 cases (worth US\$198 million) and 100 cases (worth US\$67 million) respectively. They are followed by Biljing, Tianjin, Heilongjiang, Guangdong, and Jilin. It is notable that Korean investments in the South and Central region, where foreign direct investment is most active in China, are rather limited.

The popularity of Shandong province can be explained by

⁽¹⁰⁾ A more recent survey conducted by KOTRA during November 1992-January 1993 for the Korean firms planning to invest in China show different results. The survey result shows 56.1% of the 140 firms cited market access as the main motive, while 41.5% cited low cost labor as the main motive. This difference seems to signal the change in the main motives of Korean firms toward investment in China after 1992.

⁽¹¹⁾ We can list Beijing, Tianjin, Shanghai, Shenyang, and Harbin as the major sites for this type of Korean investments.

Table 5. Geographic Distribution of Korean Investment in China
(Unit: # and US\$ mil)

| | # of | Cases | am | ount |
|-----------------------|------|-----------|-------|-----------|
| | | Share (%) | | Share (%) |
| Bohai Rim Region | 213 | 50.0 | 198.3 | 54.7 |
| Shandong province | 144 | 33.8 | 126.7 | 35.0 |
| Beijing municpality | 21 | 4.9 | 37.8 | 10.4 |
| Tianjin municipality | 37 | 8.7 | 25.5 | 7.0 |
| Hebei province | 11 | 2.6 | 8.3 | 2.3 |
| Northeast Region | 162 | 38.0 | 109.9 | 30.3 |
| Liaoning province | 100 | 23.5 | 66.7 | 18.4 |
| Heilongjiang province | 31 | 4.3 | 31.9 | 8.8 |
| Jilin province | 31 | 7.3 | 11.3 | 3.1 |
| South Region | 25 | 5.9 | 31.9 | 8.7 |
| Guangdong province | 18 | 5.9 | 31.9 | 8.7 |
| Fujian province | 5 | 4.2 | 21.8 | 6.0 |
| Hainan province | 2 | 0.5 | 0.8 | 0.2 |
| Central Region | 22 | 5.2 | 22.3 | 6.2 |
| Jiangsu province | 11 | 2.6 | 9.1 | 2.5 |
| Shanghai municipality | 6 | 1.4 | 7.5 | 2.1 |
| Zhejiang province | 5 | 1.2 | 5.7 | 1.6 |
| Other Region | 4 | 0.9 | 0.5 | 0.1 |
| Total | 426 | 100 | 362.4 | 100 |

Source: the same as Table 1.

several factors: the provincial and local governments' active pursuit of Korean investment, the relative scarcity of investment from other countries, and the geographical proximity realized through the early opening of the marine transportation route. In addition to these factors, the agglomeration effect seems to take place in this region as well. (12) Within *Shandong* province, the coastal areas around *Qingdao*, *Yantai*, and *Weihai* are the most popular sites. According to several survey results of Korean firms planning

⁽¹²⁾ As Korean investors cluster in specific areas, they can reduce some indirect costs, including costs related to information collection, transportation, and living condition for expatriates working on projects in China.

to invest in China, Shandong province continues to be the most preferred site.

Following Shandong, Liaonig province and Tianjin municipality are emerging as popular locations for Korean investment. The merits of Liaoning include its relatively developed industrial base, better infrastructure, and its role as the gateway to the outside world of Northeast China where two million ethnic Koreans live. (13) Within Liaoning province, Korean investors cluster around Shenyang, Dalian, and Yingkou. Tianjin is preferred for its location having the advantage of being a port city adjacent to Beijing. Especially, Korea's state-funded Korean Land Development Co. (KLDC) recently made a contract with Tianjin Economic-Technological Development Area (TEDA) to build an industrial park for Korean investors. The industrial park, which is to be completed by mid-1994, is expected to elicit about 100 Korean-invested enterprises.

Share Ratio Distribution

Table 6 shows the distribution of the Korean share in the Korean-invested enterprises in China. It clearly shows the popularity of wholly foreign-owned enterprise (WFOE) by Korean investors. The main reason is that WFOE allows for more management autonomy and technology protection than joint ventures do. The table shows that about 46% of all cases accounting for 51% of total investment took the form of WFOE, while the corresponding figures were respectively 40% and 47% one year ago. Furthermore, some enterprises were found to have switched from joint venture to WFOE status after operation began. The belief seems to have prevailed among Korean investors that WFOE is a relevant form of investment for short-term, export-oriented projects. Recently, however, as more information on enterprise

⁽¹³⁾ Ethnic Koreans live mostly in the three northeastern provinces, although some migration has occurred recently. It is estimated that Jilin has a population of about 1.2 million, Heilongjiang has about 0.5 million, and Liaoning has about 0.2 million.

| | below 50% | 50% | above 50% below 100% | 100% | Total |
|-------------------|--------------|--------|-------------------------|--------|-------|
| # of Cases | 66 | 73 | 92 | 195 | 426 |
| share (%) | (15.5) | (17.1) | (21.6) | (45.8) | |
| amount (US\$ mil) | 50.1 | 55.3 | 72.1 | 184.9 | 362.4 |
| share (%) | (13.8) | (15.3) | (19.9) | (51.0) | |

Table 6. Share Distribution of Korean Investment in China

Source: the same as Table 1.

management in China is accumulated and as more firms show an interest in gaining access to the domestic market, the merits of joint ventureship are again receiving attention from many potential investors.

Size Distribution

One of the main characteristics of Korean investment in China is that the scale of investment is very small. The average investment scale per case is about US\$ 0.85 million overall and about US\$ 0.82 million for manufacturing investments. They are much smaller than the corresponding figures of Korean investment to ASEAN countries, which were US\$ 1.94 million and US\$ 1.70 million by 1991. Although several major projects of substantial size have been approved, the proliferation of small-sized investment still dominates the overall pictures (See Table 7). Over 80% of all cases are projects with less than US\$ 1 million investment. There are only nine cases with US\$ 5 million or above, although they comprise about 23% of total investments. Only two cases are over US\$ 10 million.

The average small investment scale can be explained by two major reasons. First, Korean investment in China has been dominated by small projects which are implemented by the small and medium-sized firms (SMFs) or individuals in Korea. SMFs or individuals with weak capabilities in international management seem to regard investment in

^{*}On the approval base by Bank of Korea. The number denotes the share of the Korean investor.

Table 7. Size Distribution of Korean Direct Investment in China

| | below \$1 mil | \$1 mil- 2 mil | \$2 mil- 5 mil | \$5 mil and above | Total |
|------------|------------------|-------------------|-------------------|----------------------|-------|
| # of Cases | 346 | 50 | 21 | 9 (0.02) | 426 |
| share (%) | (81.2) | (11.7) | (0.5) | | (100) |
| amount | 126.0 | 78.9 | 73.8 | 83.8 | 362.4 |
| share (%) | (34.8) | (21.8) | (20.3) | (23.1) | (100) |

Source: the same as Table 1.

China as being more manageable than investment in other countries. The geographic/cultural proximities and the existence of ethnic Koreans in China may explain such a perception. Second, Korean firms have been cautious about investing in China due to uncertainties in China's investment environment, especially before Korea-China relations were established. However, this cautious attitude seems to be changing with the establishment of diplomatic ties.

IV. Performance and Perceived Problems

Since most Korean-invested enterprises in China have a short operation period, it is rather premature to assess their performances. But at this stage, Korean investors gave on-average a somewhat positive assessment on their investments in China. According to our survey, Korean investors (44 firms responded) scored an average 3.6 point for their performance on a 0 to 5 scale. In particular, export-oriented enterprises of the wholly foreign-owned type showed relatively higher satisfaction. But the performance of joint ventures targeting China's domestic market is reportedly rather poor on average.

Many factors affect performance of Korean business in China. First of all, the problem of overall investment environment in China exists. From a macro perspecive, uncertainties related with such issues as leadership succession, reform processes in general and the revocation

of MFN status by the U.S. are of major concern. Further, there are many kinds of uncertainties that face foreign investors at a micro level. There still exist various restrictions on China's domestic market access, although signs of relaxation have surfaced recently. There are many other restrictions, such as the imposition of a high percentage export requirement in the approval stage, strict requirement for foreign exchange balance, and difficulty in accessing the domestic distribution channel. Complicated and nontransparant regulations, and their arbitrary applications are also serious problems. Many Korean managers in China complain about the prevalent red tape and inefficiencies of local government organizations and other supporting organizations like banks, accounting firms, the customs office, etc. Simply, it takes too much time and too many processes to accomplish a routine job. Although the extent differs across the regions and tends to improve over time, it is still regarded as a serious problem.

Regarding government interference in enterprise management, among 26 responding enterprises on this issue, 21 (81%) of the Korean managers in China responded that they felt some indirect pressure from government organizations, although only 4 enterprises reported direct pressure or interference. The interference is reportedly focused on labor/personnel management area, followed by accounting and export-import areas. The interference in labor/personnel management is revealed most often through pressures to employ local people in general or specific person (s), and to increase the wage/subsidy level, or with an attempt to interfere in management through labor union.

Korean managers often complain about the Chinese partner's disregard for business contracts, lack of quality control, and lack of objective criterion for credit, especially for enterprises eager to increase their domestic sales and/or purchases. This problem makes reliable product marketing or raw material sourcing very difficult.

Limited labor mobility raises another problem for foreign

invested enterprises. Although the situation is improving over time, both inter-regional and inter-firm labor mobility is restricted. The household registration system (i.e., "hukou") is the main cause of inter-regional immobility, while the so-called "mini-community" role of state enterprises (especially housing provided by state enterprises) is the main cause of inter-firm immobility. They are the main causes for the rapid wage increase and shortage of skilled worker faced by foreign-invested enterprises.

Next, there are several internal problems encountered within the enterprise itself. First, difficulty in labor management revealed in lax labor discipline and low labor productivity is the main problem, especially in the initial stage of operation. In the investment projects of labor-intensive sectors like most of Korea's, the key to success is labor management. Some enterprise succeed in improving labor productivity in a short period of time by using proper incentive mechanisms and efficient worker-training programs, (14) while others fail. Here, training workers on quality control is reportedly the most difficult task.

Second, most managers report that there are substantial hidden, indirect costs in managing enterprise in China. This problem is closely related to China's peculiar investment environment mentioned above. Not only many kinds of subsidies and social benefits born by enterprises, but also fees imposed by local governments, and costs in collecting needed information are the sources of such unexpected hidden costs. Recently even wage and land costs are rising fast in some regions.

Third, conflict with their joint venture partners is frustrating many enterprises. Both the Korean and Chinese sides tend to cling to key management control rights rather than shared control rights. The collision of different

⁽¹⁴⁾ In most cases dispatched Korean technicians and skilled workers train local workers, while sometimes local workers are sent to Korea for training. Because both ways incur large costs, training workers within the shortest time is a crucial test for management.

management cultures also aggravates the situation in many cases. While Korean managers are performance-oriented even in the initial stage, the Chinese side in general cater to the workers' demands. Also, many Korean managers think that Chinese partners do not protect the Korean-side contributed technology properly.

V. Concluding Remarks

Structural changes in the Korean economy in the 1980s prompted outward foreign investment by Korean firms, which continues to increase in the 1990s. Korean outward DFI has been led by the sectors of leather & fur, miscellaneous goods, industrial chemical, footwear, apparel, electronics, glass product, other chemical, and pottery & china. Korean investment in China is single-factor dominated, seeking mainly cheap labor for export-oriented production, and there is relatively little, local-market oriented DFI. (15) The rise of China as strong attraction for Korean labor-intensive DFI prompted the relative decline of Korean labor-intensive DFI in ASEAN during 1991 and 1992. Thus, more recent Korean DFI in ASEAN is becoming more capital-intensive DFI, whereas prior to 1990 Korean DFI in ASEAN was primarily cheap-labor oriented and only secondarily related to the local market for final goods.

In 1993, the Korean government and big business reached a common understanding that without internationalization, there will be no future for the Korean economy and no international competitiveness can be created and maintained. Government perception on inward and outward DFI has changed from the old one preoccupied with the

⁽¹⁵⁾ Recently, Chinese policies toward foreign companies in China are getting loosened in terms of the restriction on domestic sales of their products. Korean investors are already responding to the rapidly changing conditions in the Chinese market and investment environment. Thus, local-maket oriented Korean investment is springing up from 1993, in particular durable consumer goods industries.

balance-of-payment effects of DFI to the new one focused on its effects on internationalization of production and competiveness. Thus, in 1993 when they revised laws related to DFI, the Korean government has abolished many restrictions on, and provided more attractions toward, both inward and outward DFI. These changes are expected to stimulate more DFI into and from Korea. Thus, in coming years, we will see a steady flow of Korean outward DFI, based on diverse motivations across diverse sectors. It is almost certain that the recent rapid increase of Korea's investments in China will continue in the foreseeable future. unless serious political turmoil arises in China or an alternative investment site emerges, namely North Korea. In coming years, not only small-scale investments but also large-scale investment projects by Korea's big conglomerates will be conducted. Currently there are many large scale projects under the negotiation stage in diverse sectors of electronics (VCR, telephone-switching system, semiconductor), steel, cement, automobiles, and oil-refineries and other petro-chemical business. (16)

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⁽¹⁶⁾ Some of them are already in the implemention stage. Recently, Daewoo received approval for US\$ 99.9 million investment for cement production in Shandong, and so did Samsung for US\$ 11.2 million investment for VCR production in Tianjin. Daewoo and Samsung are among four largest chaebuls in Korea.

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