
desarrollo productivo

Korean OFDI:
investment strategies and corporate
motivations for investing abroad

Jae Sung Kwak



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This document was prepared by Dr. Jae Sung Kwak profesor from Hyung Hee University, consultant of the Division of Production, Productivity and Management.

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Introduction

International flows of capital in the form of foreign direct investment have become an important means of promoting economic development in many countries. The spread of globalization and the activity of transnational corporations have been driving forces behind these flows have already been adequately analyzed. An important new phenomenon of recent decades is the rapid increase in the outward foreign direct investment (OFDI) flows from developing countries.

Much less attention has been paid to outward investment by developing countries, mainly because it was negligible until recently. OFDI from emerging economies is playing an increasingly important role in enhancing the competitiveness of their companies and their integration into the global economy. It helps strengthen national firms' competitiveness by providing access to strategic assets, technology, skills, natural resources and markets, and in improving their efficiency. The internationalization provides greater opportunities for international cooperation, especially South-South, as the bulk of the investment goes to other developing countries.

Therefore, the governments of many emerging market countries are now paying closer attention to addressing their enterprise competitiveness through OFDI. In this regard, there is a need to further analyze the trends and features of OFDI to help emerging markets' governments design and implement an appropriate framework to benefit from this phenomenon.

The main purpose of this paper is to survey the trends and motivations of Korean overseas foreign direct investments. It consists of three sections: first, it outlines the evolution of Korean OFDI in terms of investment destinations, industry and company size. Secondly, central characteristics of Korean OFDI are analyzed, paying special attention to the relations between parent companies and subsidiaries, investment patterns and R&D activities. Lastly, the motivations as to why Korean companies go abroad and make overseas foreign direct investment are analyzed.

It should be emphasized at the outset that official statistics of the Korean Export Import Bank track the evolution of Korean OFDI; however, they are subject to certain shortcomings with regards to their reliability and interpretation (Box 1).

Box 1
RELIABILITY OF KOREAN OFDI STATISTICS

Korea Eximbank is the only authoritative source of statistics for Korean OFDI. However, as it is based on company reporting some of the qualitative as well as quantitative aspects of this investment are very difficult to trace. First, it only concerns the initial destination of the investment and no subsequent follow-up is made with regard to the final destination. Therefore, offshore financed projects are not adequately captured by this reporting system. This means that even though a company may relocate overseas assets from one host country to another there is no adjustment made to the official statistics of Korea. There are numerous examples of such. One, LG Electronics invested in Netherlands in 2001 with capital withdrawn from China and Indonesia. Two, in 2004, Korean investment to Latin America increased by 87% compared to the previous year and this was mainly a result of Hyundai Motor Co. and NHN, the largest Internet portal company in Korea, investing large amounts of capital, 85 million dollars and 82 million dollars respectively, in a tax haven, Cayman Island. HMC subsequently transferred these resources to China for the purpose of acquiring a local subsidiary. NHN established a holding company for further investment in Internet game industry (Suh, 2004). Some investments of Samsung and LG Electronics in Mexico are financed from their US subsidiaries, so they are not counted as Korean OFDI in Latin America from the statistical viewpoint of the Korean Eximbank. Interestingly, Mexico is considered part of North America by most of the big Korean TNCs.

Second, another challenge for Korean OFDI statistics is that there are not many reliable sources for the sectoral distribution of such investment. Although there are numerous associations covering the major industries, such as textiles, electronics, automotive, and construction, not many of them maintain data of overseas investment. Above all else, Korea lacks a nationwide industrial standard for investment data collection. In contrast to foreign investment statistics, trade statistics provide sectoral and other information because there is a specialized institution (KITA - Korea International Trade Association) for that purpose.

Third, one new characteristic of late 1990s and early 2000s was the sharp increase in OFDI withdrawals. The total amount of OFDI withdrawn during 1998-2002 reached 8 billion dollars, which was no less than 64.5% of the total OFDI withdrawn during the whole period from 1968 to the end of 2005. In a country in which OFDI is relatively small, it is necessary to give a special attention to the withdrawn amount. If it is reinvested, it is counted as a new investment in the official statistics. This means that the magnitude of Korea's OFDI might really be smaller than the total amount indicated. That demonstrates why the net amount of investment is a useful figure. For instance, the fact that LG electronics launched a massive investment in Netherlands with the resources withdrawn from Asia partly explains the huge gap between total investment and net investment in 2001.

Fourth, there's a huge gap in terms of FDI amount between home (sender) and host (recipient) statistics. For instance, Korea's investment to China in 2004 was 23 billion dollars according to the Chinese Ministry of Industry and Commerce, whereas Korean Exim bank statistics suggested only 9.2 billion dollars. Two reasons can be proposed for now: one, offshore financing as explained above; two, increasing importance of incremental investment of existing operations. In Korea, there seems to be no mechanism or data collection mechanism to trace the third party financing of this kind.

Source: Suh (2004), Ha (2004), Yang (2004).

Table 1
KOREA: NET OFDI, TO 2004
(Billions of Dollars)

Year	Invested Amount	Withdrawn Amount	Net Amount
Up to 1992	5.2	0.8	4.4
1993	1.2	0.2	1
1994	2.3	0.3	2
1995	3.1	0.3	2.8
1996	4.5	0.7	3.8
1997	3.7	0.3	3.4
1998	4.8	1.1	3.7
1999	3.3	1.1	2.3
2000	5.1	1.5	3.6
2001	5.1	3.3	1.8
2002	3.7	1.1	2.6
2003	4.0	0.7	3.3
2004	5.9	0.8	5.2

Source: Ha (2004)

I. Evolution of Korean OFDI

Before the 1980s, Korean development was constrained by serious balance of payments problems, such that, except for OFDI needed to access natural resources, open export markets or support special activities (i.e. foreign currency-generating construction projects in the Middle East), it was generally prohibited by the Korean government. For that reason, up to 1980, only 400 cases involving OFDI in the order of 274 million dollars were requested and only 352 cases representing OFDI worth 145 million dollars were registered.

Korean OFDI emerged in greater quantity as of the late 1980s prompted by the changes in legal and economic circumstances. The total value of the stock of OFDI rose from 0.77 billion dollars in 1987 to 3.1 billion dollars in 1993 and 13.8 billion dollars in 2001. The annual average cases and amount of OFDI were only 37 and 39 million dollars, respectively, during 1968-1987. There were huge jump in both cases and amount during following years. Annual average of Korean OFDI recorded 3,024 million dollars during 1994 - 2001, and 4,528 during 2002-2005. However, recent trend is that, although total number and amount of investment are increasing, the average amount per case has been dropping from 2.3 million dollars in 1994-2001, to 1.8 million dollars in 2002-2005. (Table 2).

Table 2
KOREAN OFDI

(Number of cases and amounts in millions of US dollars)

	1968-1987	1988-1993	1994-2001	2002-2005
Cases (yearly average)	734	2,405	10,671	10,254
	37	400	1,334	2,563
Amount (yearly average,US\$)	774	5,750	24,192	18,113
	39	958	3,024	4,528
Amount per case	1.1	2.4	2.3	1.8

Source: Korea Exim Bank

Note: based on total invested amounts

During the period of state-led development, the dominant paradigm was formed by an ideological dichotomy in which capital inflows, exports and national ownership was favored over overseas foreign investment, imports and foreign ownership. The former was regarded as the absolute good, while the latter was largely discouraged. Therefore, in a country that had suffered from chronic current account deficits and had fundamentally lacked capital, technology and management capability, it was not strange that the government had long taken the restrictive stance towards OFDI by imposing strict foreign exchange controls.

In this environment, OFDI was at most regarded as a tool to access natural resources, to create new export market, or to support foreign currency-generating projects like constructions in the Middle East. Until the mid-1980s, therefore, the first wave of the Korean OFDI was undertaken in the primary industry for developing and importing raw materials in the form of natural resource seeking. Following the outward oriented development strategy, the government first allowed local firms to invest overseas in 1968. As a legal framework, a chapter on OFDI was introduced in 1968 in foreign exchange control regulations. Yet OFDI levels remained insignificant until the mid-1980s. The value and cases of total stock of OFDI during first 13 years were only 145 million dollars and 352 cases, respectively. (Korea Exim Bank)

The second phase of Korean OFDI was triggered by the changing domestic and international environment in the late 1980s. An especially important turning point came in 1986 when Korea recorded a remarkable export growth and a sizable current account surplus. This provoked new trade barriers and restrictions in several major markets. Hence, there was a growing need for new paradigm in international economic policy. At the same time, rapid domestic wage increases eroded the cost competitive advantages of domestic production. These examples suggest that global pull and domestic push factors created a growing need for the internationalization of Korean firms. During the first OFDI takeoff period of the late 1980s, various initiatives were introduced in order to regain competitiveness, from relocating production in low-wage countries to relaxing somewhat regulations and restrictions on inward foreign direct investment.

Table 3
KOREA'S AUTHORIZED AND REALIZED OFDI
(Number of cases and Investments in thousands US dollars)

Year	Authorizations Requested		Realized Investments	
	Number of Cases	Amount of Authorization	Number of Cases	Amount Transferred
Until 1980	400	273 534	352	145 201
1981	64	293 761	49	28 211
1982	54	818 470	49	100 841
1983	67	82 969	56	108 910
1984	49	195 324	46	50 188
1985	42	219 191	38	112 775
1986	73	363 788	49	182 651
1987	109	367 361	91	409 710
1988	248	1 636 305	171	215 834
1989	369	973 844	269	570 795
1990	514	2 274 414	341	963 117
1991	526	1 797 677	444	1 109 702
1992	630	2 026 810	497	1 216 651
1993	1 052	1 996 762	689	1 264 179
1994	1 946	3 630 621	1 487	2 303 822
1995	1 572	5 222 266	1 332	3 101 518
1996	1 818	7 015 579	1 472	4 458 348
1997	1 608	6 104 602	1 330	3 709 912
1998	719	5 830 176	617	4 812 422
1999	1 268	5 101 674	1 095	3 329 344
2000	2 286	6 075 997	2 082	5 068 531
2001	2 327	6 361 881	2 153	5 163 667
2002	2 747	6 251 861	2 490	3 697 107
2003	3 079	5 579 183	2 809	4 061 534
2004	3 924	7 899 726	3 764	5 988 587
2005	4 555	9 029 993	4 389	6 557 190
2006	5 250	18 459 723	5 185	10 731 047
Total	37 296	105 883 492	33 346	69 461 794

Source: Korea Exim Bank

Third, the globalization strategy of Korean firms in the 1990s accelerated the outflow of OFDI. In line with government's globalization policy, the top national conglomerates (*chaebols*) embarked on ambitious globalization strategies aimed to increase their overseas share of production and sales, in order to complement the limited national market in an effort to catch up with global leaders¹. In some cases, however, premature and bold internationalization strategies without building up strong enough competitive advantages proved not to be sustainable, as is exemplified by bankruptcy of Daewoo and the efforts made to save Kia. They realized that the 40 million dollar domestic market was too small to fuel top *chaebols'* continued growth. At the same time *chaebols* as latecomers in the global level tried to catch up global leaders through access to

¹ A million-seller book, *It's a Big World and There's Lots to be Done*, written by Chairman Kim of Daewoo group well represented the *chaebols'* globalization strategy at that time.

high technology frontier abroad and by establishing extensive international production systems. As a result, for instance, UNCTAD listed Daewoo Corporation as second largest TNCs from developing economies ranked by foreign assets in 1998 and 6th in 1999 (UNCTAD, 2000 and 2001). Another example can be found in Samsung Electronics' investment in California. The company established a semiconductor laboratory in the Silicon Valley as part of its catching-up strategy, so that it could develop a series of DRAMs, 64K(1983-4), 256K(1984-6), 1M(1985-7). Thanks to the investment of the 1980s, Samsung has now surged as not only the global market leader in DRAMs with 32% of share but also the technology pioneer.

However, premature and bold internationalization strategies without building up strong enough advantage were not always sustainable. Korean transnationals have pushed to set up international production systems too rapidly during this period although they had relatively weak competitive advantages. As seen in the case of Daewoo group's bankruptcy and the failure of Hyundai's first foreign car plant in Canada², rapid expansion of foreign production without enough advantage and profitability could not survive in the long run.

The fourth phase came after 1997-8 financial crisis when Korean OFDI has fallen dramatically. Korean firms went through extensive post-crisis restructuring process, which included such measures as closing down foreign subsidiaries and canceling or delaying investment plans amid liquidity problems. The psychological effect of the financial crisis also played a role as the failure of foreign asset management of financial institutions has been widely condemned for provoking crisis.

A fifth stage is apparent since 2003, when the economy emerged from that crisis, Korean OFDI began to recover. In 2006, authorized Korean OFDI reached 18 billion dollars showing a dramatic increase of more than 100% from the previous year. Although Korean OFDI has increased since the 1990s, the fact that 54% of overseas subsidiaries/firms have established since 2000 means they are still in the early stage of operation. Especially, in many aspects of company management Korean firms are far behind of global competitors: they are under strong influence of parent company in Korea; most investments are concentrated in Asia, mainly in China. Nevertheless, overseas operations are increasingly regarded as independent entities as they pursuing localization process, for instance in recruiting local labor forces, and possibly generating more profits.³

Recently, pressure for the further evaluation of ever strong *won* has become a burden for Korean economy, mainly on its export performance. Therefore, the need for more outward foreign investment, both direct and portfolio, has been emphasized in the light of the situation that Korean OFDI is relatively small given the size of the economy. Total amount of Korea's OFDI per GDP was only 1.8% in 2005, far insignificant than neighboring economies like Japan (5.7%) and Singapore (21.8%).

Furthermore, Korea has by far the lowest gross foreign asset holdings in comparison to Japan, Taiwan and China, Despite the large current account surpluses that Korea has run since the Crisis of 1997-98, Korea's foreign asset holdings are only 46% of GDP, compared with 185% in Taiwan and 100% in Japan. Of this amount, the share of the foreign assets held by the private sector is as low as that of China, which is extraordinarily low mainly because most of the accumulation of foreign assets since 1978 has been carried out by the public sector in the form of

² Meanwhile, rapid export successes on the US market led Hyundai to invest early on a large manufacturing facility in Canada in 1989 anticipating projectionist reactions from the US. The problem was that the Canadian plant assembled Sonata, a mid-sized car, although Hyundai's competitive products both in quality and the price were subcompacts like Pony and Excel. Finally, the factory closed down in 1993 due to failure of the timing of investment and model choice.

³ Authorized overseas direct investment rose 104.4 percent to US\$18.5 billion in 2006 from a year earlier. Main reasons are: that local companies have increasingly been pushing to dig out overseas resources, such as oil and gas, as the country is heavily dependent on energy imports; that manufacturing plant construction by leading businesses such as Hyundai Motor Co. and Kia Motors Co. also contributed to the surge.

accumulation of official foreign reserves. Given that Korea is a member of the OECD, its low private sector holdings at only 19% of GDP, is remarkable. One could say that Korea's private sector has exhibited extreme 'home bias' in its collective investment portfolio. Morgan Stanley presented an opinion that this may very well be less a result of voluntary choice by the private sector than an outcome of strict capital controls (Jen, 2007).

In this regard, it is worthwhile to examine the recent changes in the institutional framework to promote OFDI from Korea. First came the establishment of Korea Investment Corporation (KIC) which was officially launched on July 1, 2005. KIC's aim is manage foreign exchange reserves, initially 20 billion dollars, to achieve sustainable return on foreign-currency assets and make asset management business lead Korea's financial industry to a global standard. Second was the Korean government's announcement in January of 2007 that capital outflows will be further liberalized. The boosting measures particularly target strategic areas: 1) resources and energy development projects, 2) overseas infrastructure projects, and 3) financial industry. Along with this, deregulatory measures will be made for risk sharing and more financial support (MOFE). Thirdly, government and public enterprises are in the process of selecting a financial company that will manage funds to be used for overseas oil development. The idea of investing in an oil field has long been unrealistic for SMEs and individuals. However, now oil field development is open to individual investors, that will naturally lead more OFDI in this area (Maeil Business Newspaper 2006; Seoul Economy, 2006).

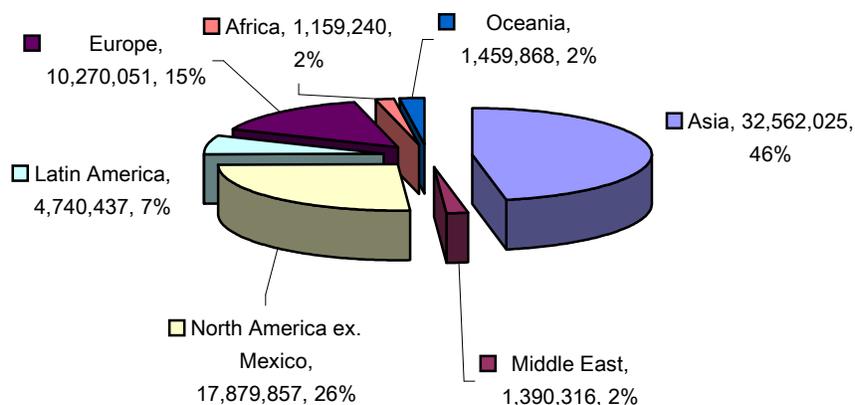
1. Korean OFDI by destination

In the early stages of Korean OFDI, it was viewed primarily as a tool for facilitating export or securing a stable supply of natural resources. Therefore, typical destinations were Korea's trading partners, North America and Asia, or oil producing countries in the Middle East. By the end of 1980s, OFDI in those regions accounted for 72.2 percent of total overseas investment stock. Projects also included investments in Indonesia to access timber supplies and in Saudi Arabia to support construction activities. Nowadays, Korean investment is far more diversified. During the period between 1968- 2006, Korean OFDI in Asian countries was 32 billion dollars (46% of total OFDI). North America ranked second (18 billion dollars, 26%), followed by Europe (10 billion dollars 15%) and Latin America (4.7 billion dollars, 7%). (see Figure 1)

In terms of individual destination countries, China absorbs 30.8% of Korea's total OFDI (3.3 billion dollars), followed by the US (1.7 billion dollars, 16.3%) and Hong Kong (0.7 billion dollars, 6.8%). Southeast Asian countries have become destinations as well: Vietnam (5.5%) attracted significant Korean OFDI in 2006, and Singapore (2.8%) and Indonesia (1.3%) continue to be preferred host countries. Geographical proximity and low wage levels are main pull factors of Southeast Asia. Noticeable new destinations are Eastern European countries such as Slovak Republic (2.7%), Poland (2.1%) and Czech Republic (1%). (Korea Exim Bank)

From 2001 onwards, 75% of total new OFDI in manufacturing sector have invested in China alone. Among the investments in China, textile and apparel industries comprise the largest proportion, accounting for 20.8%, in terms of number of projects. In terms of investment volume, the metal component sector at 31.3% represents the largest element. The main fields of investment by Korean firms in China in recent years are mainly information technology (IT), petroleum, chemical, steel, and auto industries. The focus of investment by Korean firms is currently being shifted from manufacturing to service sector and from the coastal areas to the inland. (Zhan 2004, 7) Average amount per investment is only 1.5 million dollars. The figure is highest in Latin America reaching 11 million dollars while investment to Asian countries reaches average of 1.2 million dollars. This suggests that most investments in Asian countries are undertaken by small scale investors and SMEs (Suh 2005, 3).

Figure 1
KOREA: OFDI BY DESTINATION, 1968-2006
(Number of cases and Investments in US dollars)



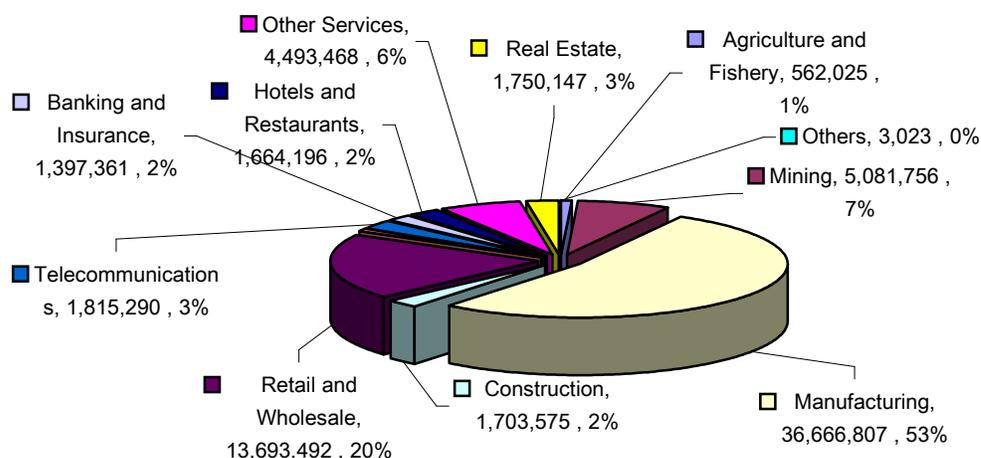
Source: Korea Exim Bank

1.2. Korean OFDI by industry

As mentioned above, early OFDI was export-facilitating and resource-seeking in such areas as mining and forestry. In the late 1980s, primary industry accounted for 50.6% of the total amount of investment while manufacturing and trading industries did 14.4% and 14.7%, respectively. Between 1968 and 2006, manufacturing sector occupied the largest portion of Korean OFDI with 37 billion dollars (53%), followed by retail and wholesale (14 billion dollars, 20%) and mining (5 billion dollars, 7%). A high degree of investment in the manufacturing sector confirms that Korea's international competitiveness lies not in service industry but in manufacturing. (Figure 2)

The breakdown of Korea's investment in manufacturing in 2006 indicates that electronics and telecommunication equipment sector reached 1.5 billion dollars (29.1% of the total manufacturing sector). Second place was taken by motors and equipments with 1 billion dollars (20.6% share). Another important sector is the petrochemical industry with a 13.6 share.

Figure 2
KOREA: OFDI BY INDUSTRY, 1968-2006
(US\$, percentage)



Source: Korea Exim Bank

1.3 Korean OFDI by size of company

Most of the Korean OFDI has been undertaken by large conglomerates. One of the most impressive results was the change introduced into the chaebols themselves. (Table 3) The corporate reform saw some of the main conglomerates decline (Samsung co. and Hyundai) or disappear as independent entities (Daewoo, Kia) and many of their competitive core elements (Samsung Electronics, Hyundai Motor Company) became more independent or were sold to competitors (Kia Motor, Hynix). A number of relative newcomers arrived to the top 10 (Kookmin Bank, SK Networks, S-Oil).

One novel feature of the current rise in OFDI is that not only are large enterprises engaging in OFDI, but also small and medium ones do so. (Figure 4) Currently there are more than 20,000 Korean firms operating in overseas territories. The number is relatively small given the size of the Korean economy. Every year, however, around 3,000 Korean FDI firms are setting up overseas operations. This suggests that many new investments are undertaken by small and medium sized companies.⁴

⁴ It is well known that large enterprises played a crucial role in the rise of Korean economy. But now chances for SMEs to grow as a conglomerates seem to be minimum. The Chosun Daily suggested that since 1993 only 0.01% of SMEs have grown to large enterprises. Among them, only 5 companies have achieved annual sales of 3 billion dollars. So far, at least, the majority of Korean companies are SMEs. (Chosun Daily, 2006)

Table 4
TOP 10 KOREAN COMPANIES, 1995, 2000 AND 2005
(Millions of Korean Won)

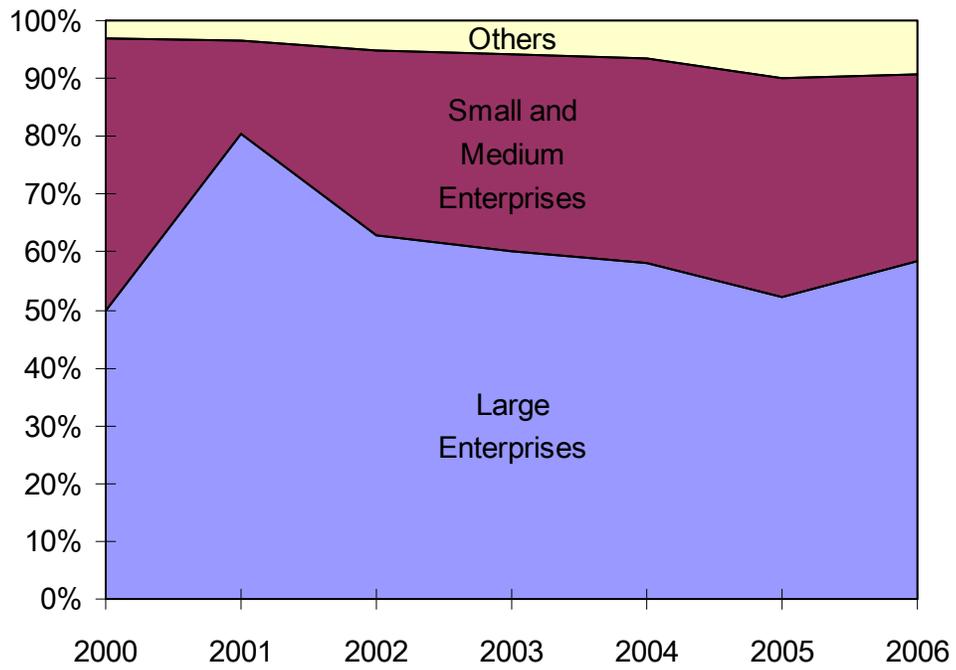
1995		2000		2005	
Company	Total sales	Company	Total sales	Company	Total sales
Samsung Corp.	19,253,806	Hyundai Corp.	40,752,502	Samsung Electronics	57,457,669
Hyundai Corp.	16,742,345	Samsung Corp.	40,641,602	Hyundai Motor	27,383,738
Samsung Electronics	16,189,838	Samsung Electronics	34,283,752	Korea Electronic Power Corp.	25,112,331
Daewoo	15,024,667	LG Int'l corp.	19,839,220	LG Electronics	23,774 152,
LG Int'l Corp.	10,447,828	Korea Electronic Power Corp.	18,252,800	Sk	21,914,583
Hyundai Motor	10,339,185	Hyundai Motor	18,230,960	Posco	21,695,044
Korea Electronic Power Corp.	10,014,563	LG Electronics	14,835,674	Kookmin Bank	17,855,258
Posco	8,218,742	Sk	14,021,615	Kia Motor	15,999,356
Sk	6,593,341	Sk Global	14,020,670	Sk Networks	14,879,511
LG Electronics	6,591,709	Posco	11,692,000	S-Oil	12,232,327

Source: Korean Exchange Data (www.kse.or.kr)

In 2006, investment by large enterprises reached 6.3 billion dollars while SMEs accounted for 3.4 billion dollars. The share of OFDI by SMEs has constantly increased till 2005, but dropped in 2006. Average investment per company dropped from 7.7 million dollars to 1.4 million dollars. The investment pattern of SMEs is different from that of large conglomerates. Whereas big companies like Samsung Electronics, LG Electronics and Hyundai Motors have traditionally invested overseas primarily to secure local markets, SMEs tend to go abroad for cheap and abundant labor. (Lee 2006) Although not classified as SMEs' investments, OFDI by individual emigrants has increased a lot as well. Over 1,440 cases of individual investment were reported during the first half of 2006 which is 23.5% increase compared to the same period of last year. Total amount of OFDI by individuals reached 480 million dollars between January and June, 2006.

With regard to the target industry, large companies and SMEs show a similar pattern as 558 cases out of 1,443 total individual investments were manufacturers (38.7%). Wholesale and retail trade occupied second place (22.1%). Hence, like other Korean companies, these two areas were preferred activities (60.8%) for individual OFDI. (Naeil Daily 2006) Although China is the most preferred destination with 648 cases, followed by the US (483 cases and 33.5%), investments in emerging market such as India, Vietnam, Indonesia seem to be ever increasing. Another characteristic is that individual investment in overseas real estate market is getting more popular. The US is the largest provider of overseas real estate market for Koreans, but China is catching up in that respect.

Figure 3
KOREAN OFDI BY SIZE



Source: Korea Eximbank (2005)

II. Characteristics of Korean OFDI

2.1. Head office control over foreign subsidiaries

The level of management control over foreign subsidiaries is a relevant detail. Wholly (100%) owned foreign subsidiaries account for 68.3% (3.9 billion dollars), and subsidiaries with 50% to 100% share holding were 10.2%. The sum of these two, in other words, investments more than 50% of equity control, is 78.5%. According to Lee (2006), there could be more majority shareholding investments from larger enterprises than SMEs. Also, it could be interpreted to mean that large Korean firms have their own significant competitive advantage in foreign markets, and therefore prefer carrying out business by themselves. Meanwhile, SMEs seem to pursue a cooperative strategy with local partners to a greater degree than large firms in foreign markets. (Lee 2006)

Korean TNCs show a clear preference for majority ownership, and it is particularly the case in mature markets like EU and the US where 84 percent and 70 percent of Korean investments are securing majority holdings, respectively. (Perrin, 2001). Some Korean firms have resorted to acquisitions or outright control when they wanted to source technology abroad and diversify into high-tech business while Japanese firms have resorted to joint ventures (Miotti and Sachwald, 2001) Cases can be found in Samsung Electronics' purchase of AST and LG's Zenith. Table 3 shows how intensively Samsung conducted overseas investments in the mid-1990s.

Table 5
SAMSUNG ELECTRONICS: TWO YEARS OF INVESTMENTS (APRIL 1993-FEBRUARY 1995)

Name of firm	Date	Scope and content
Array Microsystems (US)	Apr. 1993	SEC acquired 20% of Array and established cooperative arrangement in digital process chip technology used in multimedia products.
Harris Microwave Semiconductor (US)	May. 1993	HMS specializes in gallium arsenide chips and is one of the world's leading makers of optical semiconductors
LUX (Japan)	May 1994	Acquisition(51%) of Japanese hi-fi audio maker LUX: development and sales SEC: manufacturing and sales
Control Automation Inc.	Jun. 1994	Acquisition (51%) of the CAD/CAM software technology company
ENTEL (Chile)	Sep. 1994	Investment (15.1%) in the largest operator of telecommunication system
Integrated Telecom Technology (US)	Jan. 1995	Acquisition(100%) of ITT that specialized in ATM technology
Integral Peripherals (US)	Jan. 1995	Investment(4%) in shares of US based firm specializing in HDD technology joint development of HDD products
AST Research (US)	Feb. 1995	Investment(40.25%, later 100%) in shares of US based computer company, broad range of commercial relationships including supply and pricing of critical components, joint product development, cross OEM-arrangements and cross-licensing of patent.

Source: Kim (1997) p.18

Interestingly, the strong rivalry among Korean chaebols in domestic and foreign market and 'follow-the-pioneer' behavior resulted in geographical concentration of Korean OFDI. Indeed, the national characteristics that induce a first Korean firm to invest in a specific country might also be suited to the goal of a second firm. Twinned investments are frequently seen in the electronics industry in such examples as the presence of Samsung and LG in the US-Mexico border cities and Manaus in Brazil. (Table 5)

Table 6
OFDI AND TIME LAG BY TOP THREE ELECTRONICS FIRMS (COLOR TV)

	Sam-Sung Electronics	LG Electronics	Daewoo Electronics
U.S.A	1984	1981	
U.K.	1987	1988	
Continental Europe	Portugal (1982)	Germany (1997)	France (1992)
Mexico	1988	1988	1990
Thailand	1988	1988	
Indonesia	1991	1990	
Vietnam	1995	1995	1994
Brazil	1995	1996	
Poland	1996		1993
China	1994	1995	
India	1995	1997	

Source: Eun (2002, 10)

Box 2**RELATIONS BETWEEN PARENT COMPANIES AND SUBSIDIARIES**

With regard to parent-subsidiary relations, most of the key decisions are made by parent companies in Korea and the local decision making process seems to be minimal. Parent companies are in charge of new investments decisions and executive level personnel affairs for their foreign subsidiaries. On the contrary, local subsidiary determines salary level and personnel affairs of local employees. For instance, as far as human resource management is concerned, executives for overseas subsidiaries are directly appointed by parent companies (81.0%), but hiring/firing employees in lower ranks is the commitment of foreign subsidiaries (78.4%).

The usage of foreign subsidiary's revenue and decision on infrastructure investment were almost entirely at the parent companies' discretion. In revenue management, 23.3% of local subsidiaries make decision on the independent use of revenue, compared to 73.0% of companies that follow the decision of parent companies. Furthermore, 77.8% of companies pointed out that parent companies make on the key investment issues of overseas subsidiaries.

On the other hand, overseas subsidiaries seem to have high degree of independency in terms of division of labor with parent companies. Only 23.1% of local subsidiaries performed simple processing/assembling operations or produced parts or half finished products for their parent companies. Most of the foreign subsidiaries have developed a separated one-stop local production system in sectors different from those of parent companies (50.3%) On the other hand, 24.5% of them are engaged in identical sectors to parent companies'. In sum, 74.8% of the foreign subsidiaries show independence in production from the parent company. (Ha 2004, 57-61)

It may be difficult to definitely say what degree of firm control by the parent company is best. However, a case reported seems to reveal the necessity of certain control. In 1995 an IT company invested 15 million dollars in the US for the purpose of parts supply facilitation, R&D and access to advanced venture capital. To achieve this goal the parent company decided to operate the subsidiary with only local staff. However, after three years of operation it had to shut down the subsidiary. Main reasons revealed were the resistance of local employees to the decision of parent company and frequent communication problems that naturally lead the delay of decision making.

Source: (MOFE, <http://www.mofe.go.kr/ODI>).

2.2. R&D and technology transfer

Few of the Korean offshore subsidiaries performed R&D related operations; 11.4% had R&D department, 1% R&D center, and 1% both department and center for local R&D. The majority of them (86.5%) did not have any R&D function. This suggests that most of the parent companies regard their subsidiary as a base for production or sales, and not for R&D. Although recently established subsidiaries tend to have more local R&D centers, the weight is minimum (2%).

Table 7
OPERATION OF R&D CENTER/DEPARTMENT BY ESTABLISHMENT PERIOD

	With R&D Department	With R&D Center	With both Department and Center	Without any R&D function
Founded in 80s	12.5	0	3.1	84.4
Founded in 90-94	17.7	0.7	0.7	81.1
Founded in 95-99	12.2	0.8	1.1	86.0
Founded in 2000 or later	9.5	1.3	1.0	88.2

Source: Ha (2004, 62)

The major objectives of companies with R&D facilities were modification and reform of the existing products (69.0%), development of new products (51.4%), and the creation of new processing method (29.6%). Modification/reform and development of new products seem to have ranked top as parent companies want to customize products for the local market, as a part of their localization strategy.

A big portion of companies with subsidiaries abroad are transferring technologies, with 24.6% of them transferring key technology contents and 44.6% of non-key technology. However, as the definition of “key-technology” is vague and subjective, this result shouldn’t be regarded as transferal of “key-technology” of Korean Economy as a whole.

In comparison to the average technology level of Korean companies, the transferred technology are higher (7.6%) or in similar level (29.0%) to the average. Some companies (5.3%) have transferred technology beyond the Korean average. Industries such as textile and apparel, footwear and leather, fabricated metal, food and beverage, and electronics and telecommunications transferred technology higher than domestic average level. Textile and apparel (6.2%), footwear and leather (6.1%), and fabricated metal (8.3%) transferred their technology to foreign subsidiary in order to concentrate their production capability in international factories, replacing the less competitive domestic production facilities. Electronics and telecommunications industry made active technology transfer especially in home appliances which is less competitive than before. (Table 8)

In general, the lower the competitiveness of domestic production in the industry, the higher the probability of technology transfer is likely to happen in that industry.

Table 8
TECHNOLOGY TRANSFER OF KOREAN OFDI

	Compared to the Korean average technology level, the level of transferred technology is			Compared to the Korean average technology level, the company's technology level is			
	Lower	Similar	Higher	Lower level	Similar level	Higher level	No transfer
Total	63.4	29.0	7.6	44.0	20.2	5.3	30.5
Food & Beverage	64.3	25.0	10.7	39.1	15.2	6.5	39.1
Textile and Apparel	62.5	26.7	10.8	35.9	15.3	6.2	42.6
Footwear and Leather	75.6	14.6	9.8	47.0	9.1	6.1	37.9
Paper and Printing	40.0	60.0	0.0	16.7	25.0	0.0	58.3
Petrochemicals	76.5	18.4	5.1	61.5	14.8	4.1	19.7
Non-metallic Minerals	73.9	26.1	0.0	47.2	16.7	0.0	36.1
Basic Metal	52.2	39.1	8.7	36.4	27.3	6.1	30.3
Fabricated Metal	61.3	29.0	9.7	52.8	25.0	8.3	13.9
Machine equipment	61.6	34.2	4.1	45.0	25.0	3.0	27.0
Electronics and Tele-communications	60.2	30.7	9.1	44.4	22.6	6.7	26.4
Transportation machinery	62.3	34.4	3.3	51.4	28.4	2.7	17.6
Other manufacturing	46.7	44.4	8.9	30.4	29.0	5.8	34.8

Source: Ha (2004, 64)

Box 3**CATCHING-UP STRATEGY, TAKEOVER OF ZENITH BY LG**

Since the 1990s, the chaebols' strategies have been grounded on the conviction that they had to nurture more creative assets in order to gain technology autonomy, and thus international competitiveness. *Chaebols* have partially used foreign investment as part of their catching-up strategy. They have resorted to acquisitions, minority shareholdings and joint ventures in the US to access sophisticated R&D resources. The examples of acquiring Zenith by LG Electronics shows catching-up strategy of *chaebols* through OFDI.

The acquisition aimed at getting an instant injection of high technology and brand name. However, not long after purchasing a 57% stake in perennial U.S. money loser, LG has been forced to send Zenith to Chapter 11 bankruptcy proceedings in 1999. Furthermore, LG lost creative assets because of the conflict relationships with local management that resulted in a number of resignations. Initially the LG's investment seemed to be a failure and misplaced.

However, after five years of steady restructuring efforts and extra investment of 60 million dollars, LG managed to secure 100% share of Zenith. During this period fundamental change was undertaken by abandoning all production lines of Zenith but maintaining the R&D function. That paved the road for success. Before LG's takeover, Zenith had invested in new technology, such as Internet television boxes, cable modems, and high definition TV systems, and it upgraded color picture tube production capabilities. Especially, such original technologies as VSB (Vestigial Side Band) of Zenith became an industrial standard for digital TV that quickly replaced analogue TV. Currently VSB is licensed to over 100 digital TV manufacturers and generating more than 100 million dollars a year for LG. This one-time 'ugly duckling' became a 'goose that laid golden eggs'.

Source: Park(1998, 43-4)

2.3. Home country impact of OFDI

According to Ha (2004)'s survey, the impact of foreign investment in parent companies was positive in domestic production but negative in employment. But this result should not be regarded as an objective evaluation on the impact of foreign investment, as it reflects companies' subjective perceptions. Furthermore, if foreign investment and company restructuring are simultaneously performed the impact of restructuring could be perceived wrongly as part of the foreign investment effect.

Domestic production

Do Korean companies maintain domestic production facilities even after undertaking OFDI? This is not a question that can be easily answered. At a glance foreign direct investment did not undermine domestic production of Korean companies. According to Ha (2004)'s survey, 86% of the total effective respondents (companies) maintained domestic production facilities even after the establishment of their overseas subsidiaries. The close-down of domestic plants were undertaken by only 10% of these companies.

By industry category, footwear & leather (34.8%) and textile & apparel (28.1%) industries showed high level of tendency of closing down domestic production lines. Meanwhile, most of the transportation equipment (0%), fabricated metal (0%), and machinery (1%) maintained their domestic production lines.

In the early 90s, the percentage of factory closure was higher (21.6%), but it gradually decreased to 7.1% in the year 2000 and later. This might suggest a negative correlation between the length of foreign subsidiary's operation and the competitiveness of domestic production.

Table 9
OFDI AND DOMESTIC PRODUCTION BY PERIOD

(Unit: %)

	Closure of Domestic factory	Downsizing of Domestic Factory	Maintenance of Domestic Factory	Others
Established in 80s	6.3	25.0	65.6	3.1
Established in 90-94	21.6	19.6	54.3	4.6
Established in 95-99	10.3	19.0	65.0	5.7
Established after 2000	7.1	15.1	75.6	2.2

Source: Ha (2004. 58)

Companies tend to maintain domestic production capacity when they launch market seeking investment or when they move abroad with their partner companies. On the other hand, when the main purpose of the investment is cost reduction, companies are more likely to reduce the size of domestic production facility or to simply shut them down.

Fully 92.3% of companies investing overseas as a part of their market seeking activities kept their domestic production facilities. Only 6.3% of them chose for downsizing procedures and 1.4% for complete closure of their domestic production facilities. This result is comparable to 19.7% of factory closure rate in companies seeking for cost efficiency. These companies also showed higher proportion in preference for domestic production reduction (28.7%).

Companies investing abroad because their partner companies have reincorporated abroad showed a similar result with those seeking market entrance effect, and presented 1% proportion in factory closure and 10.6% in size reduction. Moreover, investment towards large emerging economies got along with general characteristics of cost reduction. The only difference is that the former shows lower level of closure (10.0%) and downsizing (18.0%) of domestic factories than the latter.

Table 10
MAJOR INVESTMENT BEHAVIOUR BY MOTIVES

	Closure of Domestic Production Facility	Downsizing of Domestic Production Facility	Maintenance of Domestic Production Facility
Market seeking investment	1.4	6.3	92.3
Cost efficiency seeking investment	19.7	28.7	51.6
Overseas relocation of business partner	1.0	10.6	88.5
Entry to Emerging Markets	10.0	18.0	72.0

Source: Ha (2004. 59)

Employment

Unlike production, as mentioned above, OFDI seems to have generally negative impact on national employment. Since 2000, the proportion of companies that experienced reduction in employment (23.3%) is slightly higher than companies that had an increase in their employment (20.6%). For instance, domestic employment is estimated to decrease by 7.7% by the year 2003 compared to the base year 2000, due to enlarged foreign operations. By the end of the year 2003, 119,522 employees were working in 311 parent companies, which means that 9,945 jobs were lost since 2000. Including the 2.5% of companies that stopped hiring employees from the domestic labor

market, foreign investment has played some role in company restructuring, replacing domestic labor to foreign labor. One of the evidence of such restructuring process through foreign investment is the fact that 31.4% of textile & apparel and footwear industries downsized the number of their workers.

Most of the industries reported that foreign subsidiary operations resulted in the reduction of the parent company's employment, except in basic metals, and footwear & leather industries. But this result can't be regarded entirely as the effect of foreign investment, as in many cases foreign investment were undertaken along with internal restructuring process. For example, companies in footwear and leather industry estimated 1.9% increase in employment. This is most likely due to the fact that they already have completed their restructuring process in the mid 90s. In other words, it is more proper to take this result just as an index showing the decreased capability of employment in the manufacturing industry, and as the possible function of overseas subsidiary operation as a way to reform the structure of the company

Table 11
IMPACT OF FOREIGN SUBSIDIARY OPERATION IN EMPLOYMENT OF PARENT COMPANY

	No of companies	2000 (A)	2003 (B)	Variation (B-A)	Variation rate
Total	311	129,467	119,522	-9,945	-7.7
Manufacturing	305	129,420	116,777	-9,643	-7.6
Food & Beverage	5	723	646	-77	-10.7
Textile and Apparel	66	20,825	19,456	-1,369	-6.6
Footwear and Leather	20	24,626	25,101	475	1.9
Lumber and Furniture	3	79	55	-24	-30.4
Paper and Printing	3	466	488	22	4.7
Petrochemicals	30	25,380	20,698	-4,682	-18.4
Non-metallic Minerals	11	2,818	1,986	-832	-29.5
Basic Metal	10	5,733	6,143	410	7.2
Fabricated Metal	13	9,966	9,349	-617	-6.2
Machinery & equipment	32	7,082	5,474	-1,608	-22.7
Electronics and Telecommunications	76	18,026	17,219	-807	-4.5
Transportation machinery	15	4,181	4,057	-124	-3.0
Other manufacturing	21	6,514	6,105	-409	-6.3
Non manufacturing	6	3,047	2,745	-302	-9.9

Source: Ha (2004, 67)

*Categorized by Industry based on the industry the parent company in the year 2003.

As seen in the table, 71,477 new jobs were created in manufacturing industry, and for all industries in general, 88,326 new jobs by 2003. This means an increase of 2.49% in manufacturing industry and 0.83% in whole industry compared to the base year 2000.

In effects, job creation effect of exportation of parts and half-finished products amounts to 156,193, being the sector with highest beneficiary of the effect. From which 11,395 jobs were in manufacturing sector, and the remaining 45,798 from non-manufacturing sector. On the contrary, the reduction of employment due to re-importation and import substitution was 45,181 for manufacturing and 27,194 for non-manufacturing industry.

By industry, the major creation effect of employment was found in the industry with the largest trade surplus, the electronics and telecommunication industry. (30,324 jobs). The others in the top-tier list were machinery & equipment (13,352), and textile and leather (7,095).

Table 12
EMPLOYMENT EFFECT ON DIFFERENT ECONOMIC SECTORS

	Export Promotion (A)		Re-importation	Export substitution	Sum of variation in employment
	Parts and semi-assembled products	Capital goods			
Manufacturing in General	110,395	3,324	-23,165	-19,077	71,477
Food & Beverage	1,177	40	-379	-83	755
Textile and Leather	10,533	989	-3,020	-1,407	7,095
Wood and Paper	2,237	50	-875	-240	1,172
Paper products and Publishing	989	28	-486	-176	355
Petroleum and Coas	151	7	-77	-24	57
Chemical products	7,050	527	-2,980	-1,160	3,438
Non-metallic Minerals	2,551	56	-1,216	-488	903
Basic Metal	5,653	123	-1,418	-786	3,572
Fabricated Metal	3,475	179	-1,447	-511	1,696
Machinery & equipment	19,688	364	-4,308	-2,391	13,352
Electronics and Telecommunications	46,633	443	-6,245	-10,507	30,324
Medical Instruments	1,233	61	-366	-90	838
Transportation machinery	8,138	412	-177	-1,123	7,250
Other manufacturing	886	44	-171	-91	669
Non manufacturing	45,798	1,184	-22,016	-8,117	16,849
Total	156,193	4,508	-45,181	-27,194	88,326

Source: Ha (2004, 94)

Trade

Korea's trade surplus with overseas subsidiaries reached to 6.8 billion dollars. According to the survey of Ha(2004), parts and half-finished products made 12.21 billion dollars from exports and the re-importation reached an amount of 5.66 billion dollars. By the year 2003, exports and imports in this particular pattern of trade reached 6.3% (193.82 billion dollars) and 3.2% (178,883 billion dollars), respectively.

Categorizing by effects, the export of parts and half-finished products, and capital goods increased to 3.2 billion dollars and 0.8 billion dollar, respectively. On the contrary, the reduction of revenue was due to re-importation (7.9 billion dollars), and export substitution (5.7 billion dollars).

By industry, electronics and telecommunications industry reported 2.8 billion dollars of trade surplus exporting parts and half-finished products worthy of 7.3 billion dollars. The industry not only showed the biggest effect on improving the trade balance, but also on production increase. Transportation machinery industry also had a surplus of 1.18 billion dollars.

Some industries experienced loss in trade, such as food and beverage (410 million dollars), non-metallic metal (170 million dollars), and medical instruments (170 million dollars). However,

textile and leather industries achieved a 0.12 billion dollars surplus from exportation of parts and half-finished products. (Ha 2004, 90-3)

It is noteworthy to observe the strategy of the investment of automobile industry in emerging economies. Korean carmakers launched OFDI if the sales growth potential was high or the protectionism measures were expected. In this case, ODI generally inclines to crowd out export. However what happened was that foreign productions have opened new trade routes for exports for Korean carmakers. For instance, Daewoo's or Hyundai's foreign manufacturing operations have started with large scale assembling of imported kits. In this case, foreign investment pulls exports of parts and kits to new markets.

Table 13
TRADE EFFECT

	Export promotion (A)		Re-importation (B)	Export Substitution (C)	Trade Balance (A-B-C)	Trade Balance (A-B)
	Part and Semi-assembled products	Capital goods				
Manufacturing in General	12,214,228	304,491	5,660,574	2,216,302	4,641,843	6,858,154
Food & Beverage	160,446	4,696	202,305	4,511	-41,674	-37,163
F Textile and Leather	591,934	58,548	535,194	77,630	37,658	115,288
Lumber and Paper	99,056	1,191	54,066	2,541	43,640	46,181
Printing and Publication	416	22	100	50	288	338
Petroleum and Coal	0	0	0	0	0	0
Chemical products	249,513	55,094	138,836	30,687	135,084	165,771
Non-metallic Minerals	33,398	2,176	198,588	4,098	-167,112	-163,014
Basic Metal	718,289	12,820	99,970	88,700	542,439	631,139
Fabricated Metal	39,358	8,587	17,627	2,087	28,231	30,318
Machine equipment	1,740,021	30,058	1,336,536	163,357	270,186	433,543
Electronics and Telecommunications industry	7,339,708	66,819	2,928,316	1,681,176	2,797,035	4,478,211
Medical Instruments	53,465	3,546	68,048	868	-11,905	-11,037
Transportation machinery	1,152,641	59,009	32,669	158,518	1,020,463	1,178,981
Other manufacturing	35,983	1,925	48,319	2,079	-12,490	-10,411

Source: Ha (2004, 91)

As for import creation effect, manufacturing industry in general estimates a net revenue of 1.2 billion dollars and 1.36 billion dollars for the entire industry. The export of parts and half-finished product triggered import revenue of 3.32 billion dollars and capital good sum up to 0.6 billion dollars of import revenue. Re-importation and export substitution seem to have produced each 1.46 billion dollars and 0.66 billion dollars loss.

Major beneficiary of the effect was electronics & telecommunication industry with 0,77 billion dollars in trade surplus. Basic metals gained 0.14 billion dollars and machinery & equipment 0.12 billion dollars. These industries have relatively high level of import coefficient (total import/Intermediate input), meaning that these industries present relatively higher amount of import promotion to its level of trade surplus.

Table 14
IMPORT EFFECT
(10 million US dollars)

	Export promotion		Reimportation	Export Substitution	Sum of variation in Imports	Sum of trade balance effect
	Part and semi-assembled products	Capital goods				
Manufacturing in General	3,137,404	55,429	-1,369,565	-624,950	1,198,318	3,443,525
Food & Beverage	16,656	1,238	-17,233	-1,526	-865	-40,810
Textile and Leather	64,978	5,734	-53,824	-8,818	8,070	29,589
Wood and Paper	21,688	374	-12,788	-1,478	7,796	35,844
Paper products and Publishing	3,239	54	-1,620	-626	1,047	-759
Petroleum and Coal	19,252	2,913	-11,343	-2,399	8,423	-8,423
Chemical products	234,188	10,123	-108,836	-46,367	89,108	45,976
Non-metallic Minerals	35,557	490	-18,328	-7,865	9,854	-176,966
Basic Metal	240,103	4,836	-73,162	-35,084	136,693	405,746
Fabricated Metal	20,657	590	-8,391	-2,762	10,094	18,137
Machinery & equipment	349,859	6,096	-186,209	-51,923	117,823	152,362
Electronics and Telecommunications	2,070,450	20,015	-863,817	-460,934	765,716	2,031,321
Medical Instruments	20,412	886	-10,928	-4,834	5,535	-17,440
Transportation machinery	38,433	1,954	-1,388	-131	38,868	981,595
Other manufacturing	1,932	125	-1,697	-203	158	-12,647
Non manufacturing	185,309	4,272	-90,870	-32,093	66,618	-66,618
Total	3,322,712	59,702	-1,460,435	-657,043	1,264,936	3,376,907

Source: Ha (2004, 95)

Korean OFDI contributed in the balance of payments by inducing more trades as local subsidiaries are heavily dependent on parent companies in Korea for not only parts and intermediaries, but also capital goods. This fact naturally resulted in the rise of domestic production and employment by 2.7% and 2.5%, respectively. However, the other side of the coin shows the negative impact of foreign investment in domestic employment, as OFDI has been generally accompanied with company restructuring process.

III. Motivations and corporate strategies of Korean OFDI

This analysis of Korean OFDI indicates that it has been reactivated since the resolution of the financial crisis. It began mainly as natural resource-seeking OFDI in Asia and market seeking OFDI in the major markets (North America, Europe and Asia), however, efficiency-seeking OFDI is growing fast, especially in china and other Asian countries. The Korean OFDI is primarily in manufacturing activities where the Korean economy possesses its principal competitive advantages. Both Korean TNCs and SMEs have participated in the OFDI, nevertheless, it is the global strategies of the TNCs that are putting their imprint on the evolution and nature of such outflows. Although the official statistics capture little OFDI that seeks strategic assets, it will become evident that this is more a failure of the information gathering system than an absence of those kinds of activities since part of the catching-up strategies what are today TNCs were based on it .

3.1. Determinants of Korean OFDI

According to Ha's survey (2004), it seems that investment decisions were primarily made by cost reduction motives, considering that 40.2% of the surveyed companies indicated labor and other cost reduction as their major investment motivation.

It was followed by market seeking concerns (34.5%), the overseas relocation of partner companies (9.9%), and opening up third markets (4.9%).

With regard to Chinese market in particular, labor and other cost reduction was of fundamental importance for Korean companies, representing 42.6% of the total respondents. This exceeds the average of the total respondents regardless of region they are investing in. The second important reason seems to be opening up new markets (33%). As for the size of the companies, larger enterprises are more prompted by market-seeking motivation while small and medium sized enterprises appear to make more emphasis in labor and other cost reduction (43.4%). (Ha 2004, 55-7)

Classified by industry types, most of the labor intensive industries (textile and apparel, footwear and leather, non metallic minerals, etc.) chose cost-efficiency as their major motivation for OFDI, unlike technology oriented industries such as transportation equipment, petrochemical, machinery and primary metal, in which the market seeking motivation was the dominant one. (Table 15)

Table 15
DETERMINANTS OF FOREIGN INVESTMENT BY INDUSTRY

Category	Industry Type	1st motive	2nd motive	3rd motive
Heavy Chemical Industry	Electronics and Telecommunications	Market-seeking (48.0)	Cost Reduction (36.4)	Overseas Relocation of business partners (20.2)
	Machinery & equipment	Market-seeking (48.0)	Cost Reduction (25.0)	Overseas Relocation of Partner Companies (12.0)
	Petrochemicals	Market-seeking (55.6)	Cost Reduction (23.4)	Overseas Relocation of Partner Companies /Entrance to Third World Market (6.5)
	Transportation equipment	Market-seeking (48.6)	Overseas Relocation of Partner Companies (27.0)	Cost Reduction (13.5)
	Fabricated Metal	Cost Reduction (47.2)	Market-seeking (33.3)	Entrance to Third World Market (11.1)
	Basic Metal	Market-seeking (45.4)	Cost Reduction (36.4)	Overseas Relocation of Partner Companies (12.1)
Light Industry	Textile and apparel	Cost Reduction (66.2)	Market-seeking (15.7)	Entrance to Third World Market (5.2)
	Food & Beverages	Market-seeking (54.3)	Local natural resources (13.0)	Cost Reduction (10.9)
	Footwear and Leather	Cost Reduction (65.2)	Market-seeking (16.2)	Shortage of national labor force (6.1)
	Non-metallic Minerals	Cost Reduction (36.1)	Market-seeking (18.2)	Local natural resources (13.9)
	Paper and Printing*	Cost Reduction (50.0)	Market-seeking (25.0)	Overseas Relocation of Partner Companies /Entrance to Third World Market/Shortage of National labor force (8.3)

Source: Ha (2004, 57)

Note* Paper and Printing 8.3% reflects the answer of 1 company only.

3.2. Deepening of localization

Diversified production pattern

Strategies to pursue cost reduction and possibly market seeking motives have diversified considerably, especially in Korean investments in emerging economies like China and Vietnam. Now many companies are in the process of transforming their investment pattern from simple production based on cost effectiveness to more vertically integrated form of operation by using more local parts, establishing retail networks and starting R&D activities.

Especially in a big country like China region-oriented approach tends to be adopted to solve logistics problems. In the past, typical investment pattern used to be setting-up a massive production line near metropolitan areas, mainly in Beijing and Shanghai, but increasingly small and medium sized factories are getting established to facilitate quick access to local market. These days a *Kumho* tire sold in Tienjin is more likely produced locally rather than manufactured in and transported from Beijing.

Such region-oriented approach is also needed for marketing purpose as each region has different buying power and consumption pattern. A company may want use differentiated marketing strategy in Shanghai from Shimyang. So factories to produce premium brands are in Shanghai, while those in Northeast region are focusing on mass production of popular brands. (Yang 2004,9)

Increased importance of incremental investment

A notable trend is the increase of incremental investments, in other words, reinvestment of net profits by capital increase or setting up another subsidiary. Especially in China while the government is still regulating overseas remittance of net profits tax benefits are granted if a company reinvests net profits: in this case, 40 percent of paid corporate tax is refunded.

For instance, one Korean company invested 450,000 dollars in China in late 1980s to produce parts for audio speakers. in China since the late 1980s was. After eight times of repeated capital increase total capital of Chinese subsidiary of the company now reaches nearly 5 million dollars. Among this amount, 1 million dollars can be classified as incremental investment. (Yang 2004, 24-5) Given the growing importance of incremental investment of Korean firms' OFDI, as noted in Box 1, a comprehensive study should be undertaken in this area.

3.3. Looking back, looking forward

As is the case for other emerging markets, the Korean experience suggests that overseas investment is determined by various factors, both domestic and global. Rising domestic wages, interest rates, exchanges rates, an appreciating national currency, a limited domestic market and considerable regulation are relevant domestic push factors. The need for natural resources, export markets, technology and improved efficiency are important global pull factors.

Looking toward the future, some trends can be perceived. First, while huge investments of large conglomerates will continue, micro investments (each under 1 million dollars) will increase as Korean suppliers and individual investors move offshore. Second, China will continue to be the most favored destination of Korean OFDI. However, due to wage rise and increasing competition there, some companies will contemplate alternative destinations like Vietnam or India. Thirdly, while companies are pursuing investment with traditional motivation of efficient-seeking or market-seeking OFDI, increasingly they will integrate their separate motivations into a global

strategy to improve their international competitiveness in which the continuous relocation of investments to acquire more appropriate host country conditions will become a central aspect of their activities. Fourthly, large scale investment in natural resource development will continue to grow. Due to an increase in oil prices, local companies have increasingly been pushing to dig out overseas resources, such as oil and gas, as the country is heavily dependent on energy imports. Not only the energy sector, but also the mining-related industries rose whose investment four-fold to 3.8 billion dollars in 2006.

IV. Conclusion: the need for more coherent Korean OFDI policy

The growth of Korean OFDI suggests that there exists a coordinated OFDI policy which promotes it; however, this is not necessarily the case. It is evident that a number of policy changes have taken place since the first rather restrictive law of December of 1968 and especially since liberalization began in July of 1981. The principal features of the changes dealt with four basic aspects (Moon, 2005). With regard to finance, the main aspects concerned access to loans from the Export-Import Bank of Korea and the Economic Development Co-operation Fund, negotiating investment protection agreements with host governments (62) and establishing foreign exchange management rules. In terms of taxation, negotiating double taxation agreements with host countries (57) and specific measures for resource industries were the most relevant. A third aspect had to do with access to the overseas investment insurance offered by the Korean Export Insurance Company. Finally, distinct kinds of administrative and information support were offered by the Korea Overseas Company Assistance Center, the FDI Information Network, the Korea Overseas Information System of the Ministry of Finance and Economy, the Export-Import Bank of Korea and the Korean Institute for Industrial Economics and Trade. Since February 1994, the liberalization of Korean OFDI policy included notable advances with regards to setting up a one-stop service by transaction banks, allowing OFDI from all sectors, raising the individual investor limit, and encouraging strategic alliances with foreign firms. As of December 2003, more active assistance was offered and the in-depth study of the problems of Korean TNCs with OFDI commenced.

All these changes in the existing rules and regulations and activities by distinct Korean institutions do not necessarily add up to a coherent and coordinated OFDI policy. What is missing is an overarching policy framework which relates OFDI to Korean national development goals. In this regard it should be point out that liberalization of capital outflow and *OFDI promotion plan* of January 2007 announced by MOFE was prompted for monetary purposes; to ease the fast appreciation of Won.

Instead, one would expect such an outlook to involve coordinated and coherent actions on the part of the Ministry of Finance and Economy, the Ministry of Commerce, Industry and Energy, the Korean Trade-Investment Promotion Agency and the Korean Exim Bank. This explains why -- in the context of the strengthening Korean Won which is undermining the international competitiveness of Korean products -- there is currently a flurry of activity to put together a comprehensive package of measures aimed at promoting overseas investment and further reduce existing restrictions (Korean Times, 2006). Perhaps this will transform the many elements dealing with Korean OFDI into a coherent and coordinated OFDI policy.⁵

⁵ The Ministry of Finance and Economy (MOFE) announced on January 15, 2007 the "Measures to Boost Corporate Expansion Overseas and Encourage Overseas Direct Investment." The government is trying to expand financial support tools, streamline the regulations and establishing a risk management system to revitalize corporate expansion overseas. According to the MOFE, the boosting measures particularly target strategic areas: 1) Resources and energy development projects, 2) Overseas infrastructure projects, and 3) financial industry. (MOFE)

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Annexes

Annex 1

STATISTICAL ANNEX
Korean OFDI flows by sector
Unit: Projects, US\$1,000

Year	Sector	Total Invested Amount		Liquidation, etc		Net Invested Amount	
		Project	Amount	Project	Amount	Project	Amount
1968-1980	Agriculture & Fishing	41	35,347	11	3,930	30	31,417
	Mining	3	1,454	--	--	3	1,454
	Manufacturing	35	33,226	6	9,025	29	24,201
	Construction	34	25,717	11	1,719	23	23,998
	Trade & Retail	211	31,871	37	3,123	174	28,748
	Transport & Warehousing	13	2,545	2	252	11	2,293
	Hotels & Restaurants	4	2,156	2	32	2	2,124
	Services	9	2,144	4	116	5	2,028
	Real estate	2	10,741	--	--	2	10,741
1981	Agriculture & Fishing	6	10,596	2	668	4	9,928
	Mining	1	114	--	--	1	114
	Manufacturing	7	4,571	1	410	6	4,161
	Construction	6	4,214	4	4,659	2	-445
	Trade & Retail	25	8,036	6	550	19	7,486
	Transport & Warehousing	2	137	--	--	2	137
	Hotels & Restaurants	1	397	--	--	1	397
	Services	1	146	-	--	1	146
	Real estate	--	--	--	--	--	--
1982	Agriculture & Fishing	5	8,480	1	150	4	8,330
	Mining	4	65,289	--	--	4	65,289
	Manufacturing	6	6,124	--	-	6	6,124
	Construction	6	5,930	-	-	6	5,930
	Trade & Retail	20	12,821	14	1,291	6	11,530
	Transport & Warehousing	2	234	-	-	2	234
	Hotels & Restaurants	--	700	-	-	--	700
	Services	6	1,263	2	1,819	4	-556
	Real estate	--	--	-	-	-	--
1983	Agriculture & Fishing	6	19,455	2	3,202	4	16,253
	Mining	1	43,963	-	-	1	43,963
	Manufacturing	16	26,724	-	658	16	26,066
	Construction	9	2,641	1	1,205	8	1,436
	Trade & Retail	16	12,679	7	387	9	12,292

(Continued)

	Transport & Warehousing	4	620	1	800	3	-180
	Finance & Insurance	1	125	-	-	1	125
	Hotels & Restaurants	-	2,300	-	-	-	2,300
	Services	3	407	1	74	2	333
	Real estate	-	-	-	-	-	-
1984	Agriculture & Fishing	2	5,584	2	816	-	4,768
	Mining	1	14,517	-	-	1	14,517
	Manufacturing	10	13,047	-	144	10	12,903
	Construction	7	4,479	1	100	6	4,379
	Trade & Retail	17	10,007	6	292	11	9,715
	Transport & Warehousing	2	100	2	130	-	-30
	Finance & Insurance	1	459	-	-	1	459
	Hotels & Restaurants	-	-	2	521	-2	-521
	Services	6	1,995	-	-	6	1,995
	Real estate	-	-	-	-	-	-
1985	Agriculture & Fishing	3	5,931	5	6,178	-2	-247
	Mining	2	70,980	-	31,360	2	39,620
	Manufacturing	11	20,646	2	612	9	20,034
	Construction	2	1,590	3	1,809	-1	-219
	Trade & Retail	17	11,665	16	1,089	1	10,576
	Transport & Warehousing	1	8	1	87	-	-79
	Finance & Insurance	-	125	-	-	-	125
	Hotels & Restaurants	-	-	-	-	-	-
	Services	2	1,830	2	388	-	1,442
	Real estate	-	-	-	7,500	-	-7,500
1986	Agriculture & Fishing	3	4,300	3	5,957	-	-1,657
	Mining	-	83,091	1	11,919	-1	71,172
	Manufacturing	20	76,643	3	1,645	17	74,998
	Construction	1	1,910	1	2,976	-	-1,066
	Trade & Retail	22	15,687	11	1,765	11	13,922
	Transport & Warehousing	1	74	1	100	-	-26
	Finance & Insurance	-	125	-	-	-	125
	Hotels & Restaurants	-	-	-	-	-	-
	Services	2	821	-	-	2	821
	Real estate	-	-	-	-	-	-
1987	Agriculture & Fishing	5	5,635	3	3,286	2	2,349
	Mining	4	219,088	2	63,916	2	155,172

(continued)

	Manufacturing	30	156,065	8	3,859	22	152,206
	Construction	4	2,758	2	6,342	2	-3,584
	Trade & Retail	38	23,151	13	10,951	25	12,200
	Transport & Warehousing	4	1,110	3	758	1	352
	Finance & Insurance	-	-	-	-	-	-
	Hotels & Restaurants	1	1,260	-	-	1	1,260
	Services	4	411	1	500	3	-89
	Real estate	1	232	-	-	1	232
1988	Agriculture & Fishing	8	15,074	7	3,248	1	11,826
	Mining	2	64,993	2	51,230	-	13,763
	Manufacturing	69	84,976	7	2,464	62	82,512
	Construction	8	5,165	2	255	6	4,910
	Trade & Retail	66	39,441	12	2,420	54	37,021
	Transport & Warehousing	6	516	-	-	6	516
	Finance & Insurance	1	1,000	-	-	1	1,000
	Hotels & Restaurants	3	660	-	-	3	660
	Services	7	2,809	2	50	5	2,759
	Real estate	1	1,200	-	-	1	1,200
1989	Agriculture & Fishing	11	74,393	3	13,171	8	61,222
	Mining	1	75,963	-	78,999	1	-3,036
	Manufacturing	148	280,469	10	80,084	138	200,385
	Construction	3	12,914	-	-	3	12,914
	Trade & Retail	77	61,158	8	4,587	69	56,571
	Transport & Warehousing	6	2,014	3	200	3	1,814
	Finance & Insurance	-	83	-	-	-	83
	Hotels & Restaurants	12	50,108	-	-	12	50,108
	Services	5	4,406	3	163	2	4,243
	Real estate	6	9,287	-	-	6	9,287
1990	Agriculture & Fishing	19	41,338	4	6,468	15	34,870
	Mining	6	151,922	-	112,033	6	39,889
	Manufacturing	197	487,270	9	22,282	188	464,988
	Construction	7	4,931	3	3,336	4	1,595
	Trade & Retail	78	228,615	7	2,033	71	226,582
	Transport & Warehousing	8	1,718	-	-	8	1,718
	Finance & Insurance	-	29	-	-	-	29
	Hotels & Restaurants	13	24,355	1	50	12	24,305
	Services	8	14,089	1	20	7	14,069
	Real estate	5	6,518	-	-	5	6,518

(Continued)

1991	Agriculture & Fishing	24	16,944	2	3,701	22	13,243
	Mining	3	122,948	-	59,754	3	63,194
	Manufacturing	279	607,559	12	12,341	267	595,218
	Construction	4	12,662	1	1,400	3	11,262
	Trade & Retail	93	228,995	10	5,595	83	223,400
	Transport & Warehousing	8	9,792	2	730	6	9,062
	Telecommunications	2	383	-	-	2	383
	Finance & Insurance	-	30	-	-	-	30
	Hotels & Restaurants	11	66,144	1	4,950	10	61,194
	Services	16	37,184	-	47	16	37,137
Real estate	5	15,578	-	-	5	15,578	
1992	Agriculture & Fishing	32	24,307	4	3,871	28	20,436
	Mining	7	149,982	1	79,047	6	70,935
	Manufacturing	345	657,343	13	35,126	332	622,217
	Construction	4	666	7	2,482	-3	-1,816
	Trade & Retail	86	304,650	8	5,784	78	298,866
	Transport & Warehousing	5	10,560	4	1,041	1	9,519
	Telecommunications	2	3,398	-	-	2	3,398
	Finance & Insurance	-	-	-	-	-	-
	Hotels & Restaurants	3	47,951	-	100	3	47,851
	Services	13	17,234	3	923	10	16,311
Real estate	-	4,115	-	3,245	-	870	
1993	Agriculture & Fishing	18	13,168	2	10,359	16	2,809
	Mining	8	146,030	1	89,799	7	56,231
	Manufacturing	520	559,605	27	60,887	493	498,718
	Construction	17	20,451	2	811	15	19,640
	Trade & Retail	93	445,513	29	75,276	64	370,237
	Transport & Warehousing	7	6,092	1	226	6	5,866
	Telecommunications	1	1,000	-	-	1	1,000
	Finance & Insurance	-	-	-	-	-	-
	Hotels & Restaurants	9	65,215	1	3,050	8	62,165
	Services	14	5,963	7	4,818	7	1,145
Real estate	1	1,800	-	-	1	1,800	
1994	Agriculture & Fishing	30	14,440	7	27,724	23	-13,284
	Mining	17	115,264	1	69,823	16	45,441
	Manufacturing	1,099	1,490,412	25	84,263	1,074	1,406,149
	Construction	31	31,295	8	5,986	23	25,309
	Trade & Retail	168	553,063	27	62,555	141	490,508

(Continued)

	Transport & Warehousing	29	13,755	1	215	28	13,540
	Telecommunications	3	7,675	-	-	3	7,675
	Finance & Insurance	-	-	-	-	-	-
	Hotels & Restaurants	53	44,169	2	4,000	51	40,169
	Services	49	22,065	9	2,053	40	20,012
	Real estate	9	12,318	1	16,412	8	-4,094
1995	Agriculture & Fishing	23	23,240	12	31,213	11	-7,973
	Mining	5	77,305	3	48,369	2	28,936
	Manufacturing	954	2,047,525	43	137,065	911	1,910,460
	Construction	41	80,160	3	2,254	38	77,906
	Trade & Retail	157	327,344	29	63,465	128	263,879
	Transport & Warehousing	22	43,448	3	457	19	42,991
	Telecommunications	20	296,012	-	6,196	20	289,816
	Finance & Insurance	1	5	-	-	1	5
	Hotels & Restaurants	43	56,080	-	-	43	56,080
	Services	49	94,836	5	22,489	44	72,347
	Real estate	17	94,318	1	1,950	16	92,368
1996	Agriculture & Fishing	39	20,534	3	4,245	36	16,289
	Mining	17	250,499	1	17,116	16	233,383
	Manufacturing	1,036	2,836,229	62	510,482	974	2,325,747
	Construction	34	87,475	4	1,589	30	85,886
	Trade & Retail	168	619,279	20	102,135	148	517,144
	Transport & Warehousing	33	29,911	4	1,208	29	28,703
	Telecommunications	22	199,441	-	5,654	22	193,787
	Finance & Insurance	-	-	-	-	-	-
	Hotels & Restaurants	49	109,462	2	350	47	109,112
	Services	61	239,126	6	9,133	55	229,993
	Real estate	11	49,674	1	600	10	49,074
1997	Agriculture & Fishing	23	16,916	6	2,220	17	14,696
	Mining	13	216,362	1	13,690	12	202,672
	Manufacturing	884	1,845,382	53	186,615	831	1,658,767
	Construction	28	83,979	8	2,026	20	81,953
	Trade & Retail	158	503,173	26	20,535	132	482,638
	Transport & Warehousing	29	28,612	4	2,309	25	26,303
	Telecommunications	29	423,996	1	11,500	28	412,496
	Finance & Insurance	-	-	-	-	-	-
	Hotels & Restaurants	71	195,824	4	21,707	67	174,117
	Services	79	139,590	5	3,672	74	135,918

(Continued)

	Real estate	13	205,453	1	2,808	12	202,645
	Others	1	120	-	-	1	120
1998	Agriculture & Fishing	9	17,137	2	1,956	7	15,181
	Mining	8	111,498	1	27,219	7	84,279
	Manufacturing	376	2,351,595	47	687,044	329	1,664,551
	Construction	14	93,990	5	4,834	9	89,156
	Trade & Retail	106	1,862,419	21	188,144	85	1,674,275
	Transport & Warehousing	22	10,374	2	4,545	20	5,829
	Telecommunications	14	117,216	3	124,708	11	-7,492
	Finance & Insurance	-	-	-	-	-	-
	Hotels & Restaurants	18	13,674	2	260	16	13,414
	Services	40	103,231	8	11,143	32	92,088
	Real estate	6	104,350	1	7,264	5	97,086
	Others	-	260	-	-	-	260
1999	Agriculture & Fishing	15	8,015	3	807	12	7,208
	Mining	10	210,148	4	52,839	6	157,309
	Manufacturing	689	1,669,438	51	528,847	638	1,140,591
	Construction	21	60,472	4	17,726	17	42,746
	Trade & Retail	106	1,064,949	24	297,510	82	767,439
	Transport & Warehousing	70	53,315	6	816	64	52,499
	Telecommunications	12	34,231	3	61,500	9	-27,269
	Finance & Insurance	1	100	-	-	1	100
	Hotels & Restaurants	49	61,261	2	4,882	47	56,379
	Services	117	112,979	6	79,440	111	33,539
	Real estate	4	50,395	2	11,758	2	38,637
	Others	-	40	-	-	-	40
2000	Agriculture & Fishing	19	18,139	6	5,981	13	12,158
	Mining	11	88,943	2	53,799	9	35,144
	Manufacturing	1,070	1,525,996	52	567,240	1,018	958,756
	Construction	23	97,193	3	49,084	20	48,109
	Trade & Retail	262	808,740	16	342,221	246	466,519
	Transport & Warehousing	24	35,501	7	47,038	17	-11,537
	Telecommunications	26	171,461	5	69,084	21	102,377
	Finance & Insurance	11	9,110	-	-	11	9,110
	Hotels & Restaurants	87	248,971	4	220,908	83	28,063
	Services	534	1,932,965	11	31,131	523	1,901,834
	Real estate	4	97,593	3	37,600	1	59,993
	Others	3	1,577	-	-	3	1,577
2001	Agriculture & Fishing	14	8,453	4	4,486	10	3,967

(Continued)

	Mining	9	56,749	1	7,505	8	49,244
	Manufacturing	1,264	3,814,710	63	2,341,913	1,201	1,472,797
	Construction	16	43,594	7	42,392	9	1,202
	Trade & Retail	298	880,062	19	656,055	279	224,007
	Transport & Warehousing	27	9,150	4	27,575	23	-18,425
	Telecommunications	11	45,945	11	163,931	-	-117,986
	Finance & Insurance	5	1,580	-	-	5	1,580
	Hotels & Restaurants	123	27,289	3	5,084	120	22,205
	Services	368	203,442	23	32,587	345	170,855
	Real estate	11	38,206	3	11,657	8	26,549
	Others	1	150	-	-	1	150
2002	Agriculture & Fishing	32	19,347	3	35,540	29	-16,193
	Mining	10	162,887	2	18,549	8	144,338
	Manufacturing	1,588	1,733,859	66	451,717	1,522	1,282,142
	Construction	21	60,595	1	49,506	20	11,089
	Trade & Retail	327	1,187,552	27	383,365	300	804,187
	Transport & Warehousing	32	15,216	3	1,517	29	13,699
	Telecommunications	13	37,838	7	16,329	6	21,509
	Finance & Insurance	5	3,365	1	-	4	3,365
	Hotels & Restaurants	111	38,332	11	69,732	100	-31,400
	Services	323	302,059	31	45,571	292	256,488
	Real estate	18	83,921	3	18,079	15	65,842
	Others	1	121	-	-	1	121
2003	Agriculture & Fishing	43	26,445	4	5,271	39	21,174
	Mining	17	273,470	1	17,741	16	255,729
	Manufacturing	1,788	2,145,218	81	467,623	1,707	1,677,595
	Construction	30	47,351	1	6,287	29	41,064
	Trade & Retail	360	945,255	34	104,590	326	840,665
	Transport & Warehousing	19	15,347	7	7,489	12	7,858
	Telecommunications	15	63,427	3	7,242	12	56,185
	Finance & Insurance	3	1,925	1	218	2	1,707
	Hotels & Restaurants	170	77,962	20	17,830	150	60,132
	Services	327	267,063	30	15,389	297	251,674
	Real estate	30	100,910	4	36,158	26	64,752
	Others	1	100	-	-	1	100
2004	Agriculture & Fishing	52	34,438	2	7,108	50	27,330
	Mining	28	302,506	1	7,782	27	294,724
	Manufacturing	2,225	3,359,965	121	395,890	2,104	2,964,075
	Construction	48	77,526	6	12,278	42	65,248
	Trade & Retail	471	1,113,910	44	148,171	427	965,739

(Continued)

(Concluded)

	Transport & Warehousing	35	20,801	7	4,926	28	15,875
	Telecommunications	12	80,885	5	5,564	7	75,321
	Finance & Insurance	-	360	-	125	-	235
	Hotels & Restaurants	316	108,892	14	73,924	302	34,968
	Services	552	597,445	41	89,067	511	508,378
	Real estate	28	192,192	2	11,396	26	180,796
	Others	1	655	-	-	1	655
2005	Agriculture & Fishing	34	17,241	1	1,395	33	15,846
	Mining	8	135,167	1	647	7	134,520
	Manufacturing	996	1,495,064	37	81,304	959	1,413,760
	Construction	55	64,270	7	1,765	48	62,505
	Trade & Retail	381	569,412	19	14,875	362	554,537
	Transport & Warehousing	40	67,668	2	3,453	38	64,215
	Telecommunications	7	87,531	1	6,972	6	80,559
	Finance & Insurance	1	300	2	1,139	-1	-839
	Hotels & Restaurants	179	75,998	2	481	177	75,517
	Services	296	264,567	16	63,799	280	200,768
	Real estate	22	52,869	1	4,519	21	48,350
	Others	-	-	-	-	-	-
Total		25,758	54,640,766	1,940	12,096,445	23,818	42,544,321

Source: Own elaboration.

Annex 2

Korean OFDI flows by region

Unit: Projects, US\$1,000

Year	Region	Total Invested Amount		Liquidation, etc		Net Invested Amount	
		Project	Amount	Project	Amount	Project	Amount
1968-1980	Asia	88	49,533	14	12,168	74	37,365
	Middle East	30	22,608	4	1,540	26	21,068
	North America excl. Mexico	118	32,727	24	1,683	94	31,044
	Latin America	20	4,879	9	468	11	4,411
	Europe	51	5,213	2	319	49	4,894
	Africa	20	25,266	5	1,277	15	23,989
	Oceania	25	4,975	15	742	10	4,233
	Total	352	145,201	73	18,197	279	127,004
1981	Asia	17	5,489	1	750	16	4,739
	Middle East	6	3,408	3	4,559	3	-1,151
	North America excl. Mexico	13	4,667	4	485	9	4,182
	Latin America	3	978	1	410	2	568
	Europe	1	1,503	2	65	-1	1,438
	Africa	4	919	2	18	2	901
	Oceania	5	11,247	-	-	5	11,247
	Total	49	28,211	13	6,287	36	21,924
1982	Asia	11	6,614	2	194	9	6,420
	Middle East	5	6,610	2	506	3	6,104
	North America excl. Mexico	16	42,188	5	350	11	41,838
	Latin America	5	1,061	-	-	5	1,061
	Europe	5	2,153	7	710	-2	1,443
	Africa	3	593	1	1,500	2	-907
	Oceania	4	41,622	-	-	4	41,622
	Total	49	100,841	17	3,260	32	97,581
1983	Asia	18	28,466	-	3,768	18	24,698
	Middle East	5	2,624	3	2,079	2	545
	North America excl. Mexico	23	48,686	5	354	18	48,332
	Latin America	5	312	-	-	5	312
	Europe	2	12,614	3	57	-1	12,557
	Africa	2	416	-	-	2	416
	Oceania	1	15,796	1	68	-	15,728
	Total	56	108,914	12	6,326	44	102,588
1984	Asia	7	10,285	3	333	4	9,952
	Middle East	4	6,690	-	-	4	6,690

(Continued)

	North America excl. Mexico	25	19,018	3	180	22	18,838
	Latin America	3	739	-	-	3	739
	Europe	1	1,016	2	73	-1	943
	Africa	3	581	3	35	-	546
	Oceania	3	11,859	2	1,382	1	10,477
	Total	46	50,188	13	2,003	33	48,185
1985	Asia	14	17,671	5	848	9	16,823
	Middle East	1	10,298	3	4,008	-2	6,290
	North America excl. Mexico	12	26,813	14	22,713	-2	4,100
	Latin America	3	2,858	1	59	2	2,799
	Europe	3	38,813	4	169	-1	38,644
	Africa	1	231	1	5,000	-	-4769
	Oceania	4	16,091	1	16,226	3	-135
	Total	38	112,775	29	49,023	9	63,752
1986	Asia	12	4,064	4	5,658	8	-1594
	Middle East	2	80,247	2	4,867	-	75,380
	North America excl. Mexico	26	80,640	7	3,329	19	77,311
	Latin America	3	2,720	2	75	1	2,645
	Europe	3	5,582	1	130	2	5,452
	Africa	-	-	2	279	-2	-279
	Oceania	3	9,398	2	10,024	1	-626
	Total	49	182,651	20	24,362	29	158,289
1987	Asia	18	132,359	11	3,546	7	128,813
	Middle East	1	70,908	2	2,537	-1	68,371
	North America excl. Mexico	41	188,603	10	23,776	31	164,827
	Latin America	14	4,225	2	549	12	3,676
	Europe	10	6,844	3	49,049	7	-42205
	Africa	2	622	1	8,937	1	-8315
	Oceania	5	6,149	3	1,218	2	4,931
	Total	91	409,710	32	89,612	59	320,098
1988	Asia	65	44,464	9	4,595	56	39,869
	Middle East	1	41,213	2	48,776	-1	-7563
	North America excl. Mexico	57	95,829	13	5,352	44	90,477
	Latin America	15	14,209	2	193	13	14,016
	Europe	16	15,443	3	243	13	15,200
	Africa	3	1,460	2	308	1	1,152
	Oceania	14	3,216	1	200	13	3,016
	Total	171	215,834	32	59,667	139	156,167
1989	Asia	125	127,995	6	1,800	119	126,195
	Middle East	1	31,648	-	78,888	1	-47240
	North America excl. Mexico	73	283,417	8	81,055	65	202,362

(Continued)

	Latin America	28	55,429	3	81	25	55,348
	Europe	16	19,137	4	774	12	18,363
	Africa	5	8,341	2	118	3	8,223
	Oceania	21	44,828	4	14,488	17	30,340
	Total	269	570,795	27	177,204	242	393,591
1990	Asia	186	292,405	8	4,068	178	288,337
	Middle East	-	40,276	1	112,686	-1	-72410
	North America excl. Mexico	86	438,253	10	21,450	76	416,803
	Latin America	26	66,813	2	357	24	66,456
	Europe	21	64,099	3	4,752	18	59,347
	Africa	2	26,518	1	2,376	1	24,142
	Oceania	20	32,421	-	533	20	31,888
	Total	341	960,785	25	146,222	316	814,563
1991	Asia	270	427,040	6	5,244	264	421,796
	Middle East	-	58,572	1	57,013	-1	1,559
	North America excl. Mexico	83	460,819	13	16,054	70	444,765
	Latin America	36	41,596	4	1,838	32	39,758
	Europe	35	89,423	-	1,330	35	88,093
	Africa	5	18,004	2	2,076	3	15,928
	Oceania	16	22,765	2	4,963	14	17,802
	Total	445	1,118,219	28	88,518	417	1,029,701
1992	Asia	360	519,682	18	17,665	342	502,017
	Middle East	2	75,250	3	63,012	-1	12,238
	North America excl. Mexico	61	393,023	10	26,054	51	366,969
	Latin America	28	36,504	1	6,483	27	30,021
	Europe	33	143,127	5	11,263	28	131,864
	Africa	4	29,065	2	1,399	2	27,666
	Oceania	9	23,555	1	5,743	8	17,812
	Total	497	1,220,206	40	131,619	457	1,088,587
1993	Asia	553	503,349	20	34,052	533	469,297
	Middle East	4	85,694	2	66,517	2	19,177
	North America excl. Mexico	58	392,126	31	111,986	27	280,140
	Latin America	29	43,201	5	17,242	24	25,959
	Europe	32	175,047	9	8,911	23	166,136
	Africa	6	30,681	1	2,023	5	28,658
	Oceania	6	34,739	2	4,495	4	30,244
	Total	688	1,264,837	70	245,226	618	1,019,611
1994	Asia	1,214	1,153,594	32	83,760	1,182	1,069,834
	Middle East	4	38,273	3	53,900	1	-15627
	North America excl. Mexico	135	567,016	30	58,132	105	508,884
	Latin America	37	49,899	7	28,942	30	20,957
	Europe	55	357,215	5	39,098	50	318,117

(Continued)

	Africa	8	113,517	1	3,357	7	110,160
	Oceania	35	24,942	3	5,842	32	19,100
	Total	1,488	2,304,456	81	273,031	1,407	2,031,425
1995	Asia	1,045	1,741,283	43	135,884	1,002	1,605,399
	Middle East	1	31,624	1	2,323	-	29,301
	North America excl. Mexico	139	549,864	33	95,119	106	454,745
	Latin America	31	122,441	13	54,588	18	67,853
	Europe	71	613,825	7	15,900	64	597,925
	Africa	7	41,733	-	3,332	7	38,401
	Oceania	38	39,503	2	6,312	36	33,191
	Total	1,332	3,140,273	99	313,458	1,233	2,826,815
1996	Asia	1,079	1,850,627	62	130,700	1,017	1,719,927
	Middle East	5	26,484	2	2,395	3	24,089
	North America excl. Mexico	198	1,599,500	25	394,747	173	1,204,753
	Latin America	40	272,567	2	24,387	38	248,180
	Europe	71	604,146	8	97,004	63	507,142
	Africa	8	17,145	1	181	7	16,964
	Oceania	69	71,161	3	3,098	66	68,063
	Total	1,470	4,441,630	103	652,512	1,367	3,789,118
1997	Asia	914	1,731,241	65	137,678	849	1,593,563
	Middle East	2	68,717	2	644	-	68,073
	North America excl. Mexico	229	896,624	15	57,230	214	839,394
	Latin America	35	280,028	7	14,745	28	265,283
	Europe	72	432,858	14	26,762	58	406,096
	Africa	17	113,387	1	21,281	16	92,106
	Oceania	59	136,552	5	8,742	54	127,810
	Total	1,328	3,659,407	109	267,082	1,219	3,392,325
1998	Asia	398	2,067,814	47	549,163	351	1,518,651
	Middle East	1	18,710	-	12,510	1	6,200
	North America excl. Mexico	135	989,341	30	251,839	105	737,502
	Latin America	14	243,265	7	19,242	7	224,023
	Europe	38	1,229,911	5	184,574	33	1,045,337
	Africa	9	106,730	1	11,548	8	95,182
	Oceania	18	129,973	2	28,241	16	101,732
	Total	613	4,785,744	92	1,057,117	521	3,728,627
1999	Asia	671	1,281,729	52	361,474	619	920,255
	Middle East	2	863	-	-	2	863
	North America excl. Mexico	323	1,417,759	30	478,665	293	939,094
	Latin America	24	227,723	4	7,910	20	219,813
	Europe	41	302,401	11	169,773	30	132,628
	Africa	10	25,415	1	5,320	9	20,095
	Oceania	23	69,453	7	32,983	16	36,470

(Continued)

	Total	1,094	3,325,343	105	1,056,125	989	2,269,218
2000	Asia	1,186	1,564,898	43	713,140	1,143	851,758
	Middle East	4	26,678	-	-	4	26,678
	North America excl. Mexico	709	1,405,221	41	157,354	668	1,247,867
	Latin America	49	1,504,743	9	72,271	40	1,432,472
	Europe	67	288,978	9	296,515	58	-7537
	Africa	7	155,954	1	132,170	6	23,784
	Oceania	52	89,717	6	52,636	46	37,081
	Total	2,074	5,036,189	109	1,424,086	1,965	3,612,103
2001	Asia	1,428	1,373,323	71	1,924,438	1,357	-551,115
	Middle East	2	19,267	-	-	2	19,267
	North America excl. Mexico	529	1,474,172	45	1,182,221	484	291,951
	Latin America	25	98,050	6	33,792	19	64,258
	Europe	69	2,128,820	9	146,846	60	1,981,974
	Africa	7	15,113	-	242	7	14,871
	Oceania	87	20,585	7	5,646	80	14,939
	Total	2,147	5,129,330	138	3,293,185	2,009	1,836,145
2002	Asia	1,818	1,721,860	70	408,857	1,748	1,313,003
	Middle East	11	30,766	-	272	11	30,494
	North America excl. Mexico	468	598,086	55	108,040	413	490,046
	Latin America	30	247,066	6	59,728	24	187,338
	Europe	70	955,457	14	423,606	56	531,851
	Africa	9	13,376	3	33,493	6	-20,117
	Oceania	75	78,481	7	55,909	68	22,572
	Total	2,481	3,645,092	155	1,089,905	2,326	2,555,187
2003	Asia	2,085	2,371,297	88	241,815	1,997	2,129,482
	Middle East	5	10,625	2	70	3	10,555
	North America excl. Mexico	551	1,063,176	73	309,980	478	753,196
	Latin America	31	182,611	5	11,873	26	170,738
	Europe	68	220,753	7	114,141	61	106,612
	Africa	5	23,591	1	-	4	23,591
	Oceania	58	92,420	10	7,959	48	84,461
	Total	2,803	3,964,473	186	685,838	2,617	3,278,635
2004	Asia	2,705	3,328,595	122	473,754	2,583	2,854,841
	Middle East	9	24,090	2	862	7	23,228
	North America excl. Mexico	860	1,384,578	76	168,732	784	1,215,846
	Latin America	30	341,489	6	15,204	24	326,285
	Europe	99	683,975	21	80,374	78	603,601
	Africa	13	50,667	6	3,307	7	47,360
	Oceania	52	76,181	10	13,998	42	62,183
	Total	3,768	5,889,575	243	756,231	3,525	5,133,344
2005	Asia	1,392	1,686,177	51	92,637	1,341	1,593,540

(Continued)

(Concluded)

Middle East	3	6,010	-	-	3	6,010
North America excl. Mexico	492	629,049	23	29,608	469	599,441
Latin America	18	162,886	7	40,475	11	122,411
Europe	68	229,568	4	16,953	64	212,615
Africa	9	51,956	-	-	9	51,956
Oceania	37	64,441	4	676	33	63,765
Total	2,019	2,830,087	89	180,349	1,930	2,649,738
Total	25,758	54,640,766	1,940	12,096,445	23,818	42,544,321

Source: Own elaboration.

Korean FDI: Stocks by Sector (1968-2005)*Unit: Projects, US\$1,000*

Sector	Total Invested Amount		Liquidation, etc		Net Invested Amount	
	Project	Amount	Project	Amount	Project	Amount
Agriculture & Fishing	516	504,897	104	192,951	412	311,946
Mining	196	3,211,132	26	913,136	170	2,297,996
Manufacturing	15,662	29,329,661	799	6,669,540	14,863	22,660,121
Construction	474	933,928	95	222,821	379	711,107
Trade & Retail	3,821	11,869,447	490	2,498,764	3,331	9,370,683
Transport & Warehousing	451	378,618	70	105,872	381	272,746
Telecommunications	189	1,570,439	39	478,680	150	1,091,759
Finance & Insurance	30	18,721	4	1,482	26	17,239
Hotels & Restaurants	1,326	1,319,160	73	427,861	1,253	891,299
Services	2,891	4,370,070	217	414,392	2,674	3,955,678
Real estate	194	1,131,670	23	170,946	171	960,724
Others	8	3,023	-	-	8	3,023
Total	25,758	54,640,766	1,940	12,096,445	23,818	42,544,321

Source: Own elaboration.

Korean OFDI: stocks by region (1968-2005)*Unit: Projects, US\$1,000*

Region	Total Invested Amount		Liquidation, etc		Net Invested Amount	
	Project	Amount	Project	Amount	Project	Amount
Asia	17,679	24,041,854	853	5,347,989	16,826	18,693,865
Middle East	111	838,153	40	519,964	71	318,189
North America excl. Mexico	5,460	15,081,195	633	3,606,488	4,827	11,474,707
Latin America	582	4,008,292	111	410,912	471	3,597,380
Europe	1,018	8,627,921	162	1,689,391	856	6,938,530
Africa	169	871,281	41	239,577	128	631,704
Oceania	739	1,172,070	100	282,124	639	889,946
Total	25,758	54,640,766	1,940	12,096,445	23,818	42,544,321

Source: Own elaboration.

Net invested amount = Total invested – liquidation etc

Liquidation etc = reduction of the investment value due to liquidation of subsidiary's assets or repayment of lending

The number of projects is equal to that of overseas subsidiaries



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