

## Foreign Investment and Trade Promotion Schemes: With Some Comparisons between Korea and Latin American Countries

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This paper reviews the role of direct foreign investment and the trade promotion schemes within an outward-looking development strategies in Korea. The paper also provides some comparisons of trade orientation and DFI between Korea and key Latin American countries. In Korea, foreign investment policies have been formulated to be compatible with the indigenous development strategies. Unlike Latin American countries, relatively little reliance on DFI in Korea during the industrial transformation process could be explained by the tremendous efficacy of the export activity as a means of acquiring industrial competence.

### I. Introduction

Countries which are unable to generate sufficient domestic savings to fuel their aspirations for economic growth have historically sought financing from other countries. Even the United States relied heavily on foreign savings during the period from 1835 to 1860. However, Japan has actively discouraged inflows of foreign savings and investment. Yet both countries today enjoy industrial superpower status in the world. This suggests that foreign savings can help economic development but may not be a prerequisite.<sup>1</sup>

In general, foreign savings includes both official savings and private savings. Most official savings are on concessional terms in the form of outright gifts, or loans bearing lower interest rates and longer repayment periods than would be available in the private international capital markets. Foreign private savings consist of four elements: direct foreign

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<sup>1</sup> See Gills, et. al. (1983), p. 365.

investment, portfolio investment, commercial bank lending, and export credits. Of these, direct foreign investment and portfolio investment constitute foreign investment. This paper will focus on the role of foreign investment, with an emphasis on direct foreign investment, as it has more relevance to the economic development of Latin America and Korea. Direct Foreign Investment (DFI) is made by nonresidents, typically but not always multinational corporations.

Portfolio investment refers to the purchase of host-country bonds or stocks by foreigners without acquiring managerial control. This was a very important form of foreign investment in the nineteenth and early twentieth century, but is no longer so.

Most developing countries consider foreign investment to be important in their economic development. Controversy, however, still surrounds foreign investment as to whether it makes a positive or negative contribution to the economic development of developing countries. Whether, and to what extent, the host country reaps some of the rewards of DFI, and the investor's interests conflict with the host-country's strategies for developing particular industries, are indeed open for debate.

The primary purpose of this paper is: a) to provide descriptive information about the inflows of DFI and foreign capital to Korea in the context of the outward-looking development strategies since 1962; and b) to discuss the effects of these inflows on Korea's economic development and particularly on export promotion. The secondary objective of this paper is to delineate differences in the roles of DFI in some Latin American countries and in Korea. As crude as the comparison may be because of the lack of relevant data, it would still be insightful to carry on some comparative analysis for the purpose of the KDI/EDI seminar, of which most foreign participants are Latin American.

The paper is organized as follows: section two describes briefly outward-looking development strategies and related export-promotion schemes; section three discusses the role of foreign investment in Korea in promoting foreign savings and the transfer of foreign technologies; section four deals with the role of DFI in Korea; section five presents briefly Latin American experiences in the utilization of foreign investment for economic development, in comparison with Korea; and the paper concludes with some remarks and lessons that can be drawn from the experiences of some Latin American countries and Korea.

## II. From Inward-Looking to Outward-Looking Development Strategies

*1. Inward-Looking Strategies and Some Structural Reforms in the 1950s*

After South Korea became liberated in 1945 from Japanese colonial rule the government followed several different economic development strategies.

Shortly after the partition of the country, the Korean War broke out in 1950 and the subsequent years of fighting destroyed all of the country's existing industrial facilities as well as physical infrastructure. At the end of the Korean War in 1953, the South Korean economy was trapped in total stagnation. The country also suffered from enormous population pressure aggravated by the massive inflow of refugees from North to South Korea, which lacks significant reserves of natural resources. Indeed, the South Korean economy in the 1950s was characterized by a vicious circle of poverty, hyper inflation, and high dependence on foreign aid.

In the midst of the economic chaos after liberation, Korea implemented land reform on the basis of the cultivator-owner principle. Despite its short-run unfavorable effects on agricultural production, land reform in South Korea succeeded in removing a major socio-political obstacle to economic modernization and the creation of a more equitable society.<sup>2</sup> The government also recognized the importance of education at the early stages of modernization and increased the educational opportunities at the elementary and secondary-school levels. Coupled with Korea's traditional Confucian values, the education system provided "unlimited but educated" human capital which served as perhaps the greatest resource for the economic growth achieved since the early 1960s.

Korea's industrial policy through the 1950s was basically inward-looking. The official exchange rate remained overvalued throughout the 1950s, despite large periodic devaluations. In order to protect domestic industry, the government used both high tariffs and various quantitative restrictions.

These measures encouraged import substitution, primarily in the consumer goods industries and in light manufacturing such as textiles, chemicals, and metals. Despite the emphasis on import substitution with massive inflows of foreign assistance in manufacturing during the 1950s, the share of industry in GDP fell below that set as "normal structure" for larger manufacturing countries. By the late 1950s when the phase of "easy" import substitution in light manufacturing was completed, opportunities for further moves in this direction had been exhausted. In the

<sup>2</sup> See Ahn (1985), pp. 92-94.

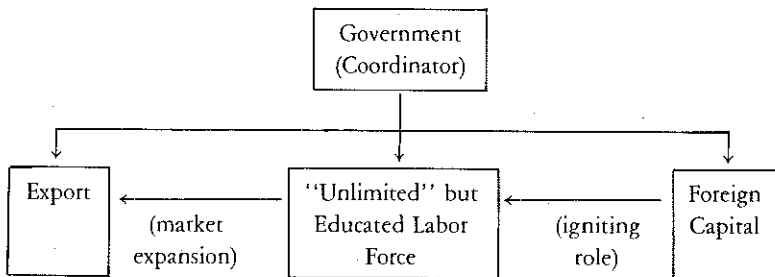
early 1960s, imports of nondurable consumer goods and intermediate goods began to be replaced by domestic production, but economic growth continued to stagnate with both high unemployment and inflation. At the same time, the United States announced that it would soon end the aid-in-grants.

## 2. *Export-Oriented Industrialization and Incentive Schemes*

The inward-looking import substitution strategies of the 1950s proved to be disappointing for the Korean economy. In the early 1960s, Korea's economic development policy changed fundamentally from an inward-looking strategy to outward-looking export promotion. Export expansion was the soundest strategy for Korea to achieve speedy economic growth because of its poor natural-resource endowment and the limited size of the domestic market at the time. The basis of the outward-looking development policy was to utilize the "unlimited" but educated supply of labor and to maximize South Korea's comparative advantage in labor-intensive manufactured goods for exports. To finance the necessary large investments, Korea continued to rely substantially on foreign capital. Furthermore, the government played an active coordinating role in combining an unlimited supply of labor, export promotion, and imported foreign capital. Figure 1 shows the schematic diagram of the key factors responsible for Korea's export-led growth.

**Figure 1**

SCHEMATIC DIAGRAM OF KEY FACTORS RESPONSIBLE FOR SOUTH KOREA'S ECONOMIC DEVELOPMENT SINCE EARLY 1960s



To pursue a new growth strategy, the government initiated a variety of economic reforms. The "won" was devalued by almost 100 percent, from 130 to 255 Won per U.S. dollar, in May 1964. In March 1965, a unitary

floating exchange rate system was adopted. Following the exchange rate reform, the government almost doubled the interest rates on bank deposits and loans in 1965 to increase voluntary private savings and discourage the unproductive use of bank credits.

Since the initiation of the First Five-Year Economic Development Plan, which clearly reflected the focus on exports, export-promotion has been further intensified under subsequent Five-Year Plans. In addition to the exchange rate and interest reforms in the early 1960s, quantitative controls on imports were gradually eased as the trade balance improved after the exchange rate reform. An export-import links system was adopted to increase the returns to exporters by giving them the right to use the full amount of their export earnings to purchase imports at the market exchange rate. Among other export incentives provided during this period were a) tariff exemption on imports of raw materials for export production, b) domestic indirect-tax exemption on intermediate imports used for export production, c) direct tax reductions on income earned from exports, d) a preferential export credit, e) a system linking import businesses to export performance, f) wastage allowance subsidies, and g) tariff and tax exemptions for domestic suppliers of intermediate goods used in export production. As a result of the outward-looking development strategies, Korea performed very well economically compared to other major developing countries of Latin America and Asia. During the period of 1965-1984, Korea was among the world leaders in export expansion

Table 1

## EXPORT PERFORMANCE AND GROWTH OF PER CAPITA GNP

	Annual Growth Rate of Exports		Annual Growth Rate of Per Capita GNP
	1965-73	1973-84	1965-85
Argentina	2.3	5.7	0.3
Brazil	10.0	8.1	4.6
Chile	-1.4	8.8	-0.1
Mexico	1.0	19.2	2.9
Peru	-2.1	9.3	-0.1
Burma	-4.9	3.2	2.3
Thailand	6.9	10.4	4.2
Korea	31.7	15.1	6.6

Source: World Bank, World Development Report 1986.

and growth of per capita GNP. It should be noted that there appears to be a significant positive relationship between rates of growth of GNP and exports.

### III. Foreign Capital and Foreign Investment

#### 1. Heavy Reliance on External Financing

As the export-oriented growth strategy continued, the amount of investment expanded rapidly. Starting at about 17 percent of GNP in the early 1960s, the ratio of investment to GNP jumped to an average of 26 percent between the mid-1960s and mid-1970s and since then has levelled off at about 30 percent annually. Foreign capital, however, financed a substantial portion of the growing demand for investment funds. Both the rising investment ratio and the magnitude of external borrowing expressed as foreign saving are shown in Table 2.

**Table 2**  
INVESTMENT AND SOURCES OF FINANCING

	(Unit: % of GNP)				
	1962-66	1967-71	1972-75	1976-80	1981-85
Investment	16.6	26.3	26.4	30.4	30.4
Savings	15.6	25.2	27.2	30.4	30.4
National	6.9	14.8	18.6	25.8	24.6
Private	6.3	8.9	14.8	19.8	18.2
Government	0.6	5.9	3.8	5.9	6.5
Net Current Transfers	6.9	3.2	1.4	1.1	2.5
Foreign	1.8	7.2	7.2	4.9	5.7
Statistical Discrepancy	1.0	1.1	0.8	0.3	0.0

Source: Bank of Korea, *Monthly Economic Statistics*, various issues; Economic Planning Board, *Major Statistics of Korean Economy*, 1986.

Due to the low level of domestic savings, Korea had to finance her investment requirements, largely in social overhead capital and fixed investment activities, through foreign savings. For this purpose, the government in 1960 introduced the Foreign Capital Inducement Act, which guaranteed the repayment of foreign loans and provided tax and other in-

centives to foreign investors and licensors of foreign technology. Sometimes explicit guarantees of profit or markets were also made to large foreign investors. In addition, two free-export zones were established in 1970 and 1974.

## 2. Structure of Foreign Borrowing

Although Korea has relied heavily upon foreign financing during the industrialization spurt, the Korean government has maintained relatively restrictive foreign-investment policies that preferred loans over direct investment. This is clear in Table 3. Over the period between 1962 and June

**Table 3**  
STRUCTURE OF LONG-TERM FOREIGN CAPITAL

(Unit: U.S. Million \$, %)

	1972-76	1977-83	1984-June '86	1962-June '86
	Amount (Ratio)	Amount (Ratio)	Amount (Ratio)	Amount (Ratio)
Loans	5,431.8 (78.4)	18,320.0 (66.9)	5,543.0 (46.1)	31,751.7 (64.5)
Long-term Trade				
Credits	554.7 (7.9)	1,970.0 (7.2)	722.0 (6.0)	3,556.5 (7.2)
Borrowings from				
Development				
Agencies	137.1 (2.0)	2,016.9 (14.6)	2,632.3 (21.9)	6,811.3 (13.8)
Direct Foreign				
Investment	557.0 (8.0)	733.9 (2.7)	524.9 (4.4)	1,933.4 (3.9)
Others	256.8 (3.7)	2,363.1 (8.6)	2,590.3 (21.6)	5,212.2 (10.6)
Total	6,927.4(100.0)	27,403.9(100.0)	12,012.5(100.0)	5,212.2(100.0)

Source: Bank of Korea.

1986, the cumulative total of long-term foreign capital amounted to \$49 billion. Of this amount, loans and borrowings from development agencies were 64.5 percent and 13.8 percent respectively, but the share of DFI was merely 3.9 percent.

A straightforward means of assessing the relative importance of DFI is to evaluate its role as a source of funds for investment. According to the United Nations Report, DFI in all developing countries in the early and middle 1970s accounted for between 10 and 20 percent of their total

capital inflows.<sup>3</sup> Compared to the international average level, DFI in Korea has been indeed very modest during the 1962-1985 period. One factor that might partly explain the low level of DFI in Korea is its poor natural-resource endowment. Indeed, there has been little DFI in Korea's primary sectors, which reflects the absence of attractive opportunities for investment in extractive activity. In contrast, nearly half the stock of DFI in developing countries worldwide is in these sectors.

#### IV. Role of Direct Foreign Investment

##### 1. *Magnitude, Country Source, and Industrial Pattern*

DFI in Korea dates back to the Japanese colonial period. Japanese subsidiaries of the giant Zaibatsu conglomerates dominated the modern industries then established in Korea. Liberation in 1945 brought with it the complete severance of all ties with Japanese firms. There was no DFI between 1945 and 1960, when the first Korean legislation controlling nongrant inflows of foreign capital was promulgated.

DFI in Korea began in import substitution for key raw materials. The first foreign investment was made by an American textile firm that produced nylon filaments. This was soon followed by investments in petroleum refining and chemical fertilizers. Until 1968, DFI in these three sectors comprised 74.4 percent of all DFI in Korea.<sup>4</sup>

Korea normalized diplomatic relations with Japan in 1965, after which Japanese DFI was again permitted in Korea. Since then, much of the DFI in Korea has been introduced by small and medium-sized Japanese firms, whose overseas investments are often limited to a single small undertaking in Korea. The causes of the rapid upsurge in Japanese investment in Korea can be explained by rising real wages in Japan, which have led a number of Japanese firms to located facilities for labor-intensive production in neighboring low-wage countries.

Table 4 shows that DFI in Korea has been dominated by Japan and the United States. Japanese investors were responsible for 46.6 percent of total DFI between 1962 and June 1986, while Americans accounted for 38.5 percent of the total over the same period. European countries shared

<sup>3</sup> United Nations, Economic and Social Commission on Transnational Corporations, *Transnational Corporations in World Development: A Re-examination*, New York, United Nations, E/C. 10/38, 1978.

<sup>4</sup> See Koo Bohn-Young (1984), "Industrial Structure and Foreign Investment: A Case Study of Their Interrelationship for Korea," KDI Working Paper 8402, p. 15.



only 11 percent of DFI in Korea between 1962 and 1986. It should be noted from Table 4 that Japan supplied 72 percent of all DFI when Korea launched its heavy chemical industrialization drive during 1972-76. The U.S., however, has been the largest direct foreign investor since 1984, when Korea undertook an extensive program of trade and financial liberalization.

Because of Korea's poor natural-resource endowment, manufacturing sectors have always been the principal recipient of DFI in Korea, as shown in Table 5. Between 1962 and June 1986, manufacturing sectors received four-fifths of the cumulative inflow of DFI, with the social overhead capital receiving almost all the rest. The primary sector accounted for only one percent of total DFI over the same period.

In manufacturing, initial inflows from 1962 to 1966 were heavily concentrated in fertilizer production and petroleum refining; this investment is categorized in Table 5 under chemicals between 1962 and 1971. Over the next ten years, however, much of the DFI went into the textiles and apparel, and electrical machinery sectors. From 1972 to 1983, the chemical sector received one fifth of total DFI and electronics claimed 15

Table 4  
FOREIGN DIRECT INVESTMENT BY COUNTRY

(Unit: US Million Dollar)

	1962- 71	1972- 76	1977- 83	1984- June '86	1962- June '86
U.S.A.	64.4 (54.8)	134.3 (24.1)	300.8 (41.0)	245.0 (46.7)	744.5 (38.5)
Japan	42.0 (35.7)	395.5 (71.8)	274.2 (37.4)	189.4 (36.1)	901.1 (46.6)
European Countries	9.0 (7.6)	21.4 (3.8)	121.2 (16.5)	64.6 (12.3)	216.2 (11.2)
Others	2.2 (1.9)	6.8 (0.3)	37.7 (5.1)	25.9 (4.9)	71.6 (3.7)
Total	117.6 (100.0)	557.0 (100.0)	733.9 (100.0)	524.9 (100.0)	1,933.4 (100.0)

Source: Bank of Korea.

Note: Figures in the parentheses denote ratios to the total.

**Table 5**  
FOREIGN DIRECT INVESTMENT BY INDUSTRY (arrival basis)

(Unit: US Million Dollar)

	1962-71	1972-83	1984-June '86	1962-June '86
Agriculture	1.2 (1.0)	14.9 (1.1)	3.1 (0.6)	19.2 (1.0)
Forestry & Fishery				
Mining & Manufacturing	101.3 (86.1)	974.4 (75.5)	368.4 (70.2)	1,444.1 (74.7)
Textile & Apparel	14.2 (12.1)	122.1 (9.5)	2.9 (0.5)	139.2 (7.2)
Chemicals	17.2 (14.6)	254.8 (19.7)	46.0 (8.8)	318.0 (16.4)
Metallic Products	5.3 (4.5)	61.5 (4.8)	10.9 (2.1)	77.7 (4.0)
Machinery	3.4 (2.9)	103.9 (8.0)	139.8 (26.6)	247.1 (12.8)
Electronics	11.2 (9.5)	196.5 (15.2)	87.6 (16.7)	295.3 (15.3)
Transport	0.3 (0.3)	55.3 (4.3)	— —	55.6 (2.9)
Others				
Social Overhead Capital	15.1 (12.9)	301.6 (23.4)	153.4 (29.2)	470.1 (24.3)
Finance	2.6 (2.2)	46.4 (3.6)	34.5 (6.6)	83.5 (4.3)
Hotel	7.5 (6.4)	153.9 (11.9)	70.9 (13.5)	232.3 (12.0)
Construction & Services	4.3 (4.3)	75.6 (5.9)	47.0 (8.9)	126.9 (6.6)
Others	0.7 (0.6)	25.7 (2.0)	1.0 (0.2)	27.4 (1.4)
Total	117.6(100.0)	1,290.9(100.0)	524.9(100.0)	1,933.4(100.0)

Source: Bank of Korea.

percent of total DFI. Much of the foreign investment in chemicals was involved in the production of synthetic fibers and resins. Since 1984, the industrial concentration of DFI has changed a great deal. The two principal sectors for DFI have been machinery and electronics, which have accounted for 27 and 17 percent, respectively, of the total DFI. Between 1962 and 1986, changes in the composition of DFI in Korea have largely paralleled the overall industrial transformation of the Korean economy.

Reflecting the industrial upgrading within manufacturing, the share of DFI in the service sectors increased steadily over the 1962-86 period. DFI in hotels accounted for about half of this investment, followed by construction and services.

In addition to the relatively small magnitude of DFI within the overall

foreign capital introduced into Korea, the rates of profit repatriation as shown in Table 6 were in the modest range of 5.3-6.8 percent per year between 1972 and 1983. The profit rate of DFI over this period turned out to be lower than most international interest rates prevailing during the same period.

Until the early 1980s, Korea allowed DFI only in cases where the investment was seen as reinforcing the development strategies of the government. For example, export-oriented investments were encouraged without restriction. DFI was not allowed in most domestic consumer goods industries, particularly when competitive local producers already existed.

The government used the foreign ownership restrictions to control the inflow of foreign investment. Since 1973, foreign majority of ownership has been allowed only in special cases, such as in entirely export-oriented,

Table 6  
KOREA'S DIRECT FOREIGN INVESTMENT AND REMITTANCE

(Unit: U.S. Million Dollar)

Year	Amount (Arrival Basis)	Capital Repatriation	Cumulative Net Balance (Arrival Basis)	Remittance	Remittance* Ratio (%)
1962-66	21.3	—	21.3	0.3	—
1967-71	96.4	1.0	116.7	22.8	—
1972-76	557.0	23.6	650.1	110.6	6.9
1977-81	531.8	207.3	974.6	243.9	6.2
1982-83	202.0	64.5	1,112.1	112.1	5.6
1984-June '86	254.9	93.1	1,543.9	223.6	—
1978	100.5	11.8	830.1	44.1	5.9
1979	127.0	90.9	866.2	54.7	6.6
1980	96.6	90.2	872.6	46.8	5.4
1981	105.4	3.4	974.6	49.0	5.6
1982	100.6	31.6	1,043.6	57.2	5.9
1983	101.4	32.9	1,112.1	54.9	5.3
1984	170.7	60.5	1,222.3	61.1	5.5
1985	250.3	16.8	1,455.8	82.8	6.8
1962-June '86	1,933.4	389.5	1,543.9	713.3	—

Source: Bank of Korea, *Joogan Naewae Kyungjae*, # 1284, Sep. 13, 1986.

\* Repatriated amount of profit (plus dividends) divided by year end net balance of foreign direct investment of previous year.

highly technology-intensive projects; projects undertaken by Korean residents abroad; and projects located in free export zones.

According to Vernon (1966) and Caves (1971), the most important conditions attracting DFI in manufacturing industries are product differentiation and oligopoly. In Korea, however, the government has maintained the position that DFI in differentiated oligopoly markets should be the exception rather than the rule.<sup>5</sup>

While the export-promotion strategies have been directed and implemented by Korea's government and indigenous entrepreneurs, Korea's industrial structure has been strongly affected by changes in the patterns of exports and domestic demand, and only somewhat by changes in the pattern of imports. Koo (1984) discovered that patterns of DFI did not have any close correlation with patterns of either exports or comparative advantage.<sup>6</sup> Consequently, the influence of DFI on Korea's industrial transformation has been marginal.

## *2. Export Promotion and Technology Transfer*

In the case of Korea, two types of DFI have been significant: one type involves basically import substitution of raw materials, and the other type deals primarily with the export promotion of products that benefit from Korea's relatively low labor costs. The initial flow of DFI into Korea during the 1962-1966 period was for import substitution and thus were almost exclusively oriented toward the domestic market. DFI made virtually no contribution to the expansion of exports during this period. When export expansion replaced import substitution as the engine of growth in the 1967-71 period, DFI began flowing into export sectors, but only in modest volumes. Thereafter the accelerated inflows of DFI in the 1970s led to a rapid rise in the proportion of exports made by foreign firms, because most of the DFI during the period was oriented toward exporting.<sup>7</sup>

With respect to technology transfer to LDCs, DFI is often advocated as

<sup>5</sup> Koo (1984), p. 19.

<sup>6</sup> For example, in 1978, 331 foreign firms were required to export all of their output. Of the 526 foreign firms approved with permission to sell some of their output in the domestic market, more than a quarter had to sell at least 50 percent of their output abroad; fewer than half (245) had no conditions regarding exports attached to their approval.

<sup>7</sup> For example, in 1978, 331 foreign firms were required to export all of their output. Of the 526 foreign firms with permission to sell some of their output in the domestic market, more than a quarter had to sell at least 50 percent of their output abroad; fewer than half (245) had no conditions regarding exports attached to their approval.

an effective means for host countries to acquire new production skills and management expertise. Notwithstanding the relative unimportance of DFI as a source of investment finance, DFI has been an important source of technology in at least a few sectors — most notably chemicals, electronics, and petroleum refining.

In transferring technologies through DFI, it should be pointed out that indigenous absorptive capacity appears to be more important than the role of foreign investors. Korea used its earliest DFI in the first chemical fertilizer plant to train Koreans who now operate several other nationally-owned fertilizer plants. Except in a few industries, technology has been acquired from abroad largely through means other than DFI. Westphal, Rhee & Pursell (1981) describe the technology transfer process in Korea as follows.<sup>8</sup>

“The purchase of technology through licensing has been of modest importance as the initial source of process technology; machinery imports and turnkey plant construction have been of much greater consequence in the transfer of technology; and a tremendous amount of know-how has entered with Koreans returning from study or work abroad. What is very important, the assimilation of technological know-how has been great.”

However, electronics and certain chemical industries in Korea perhaps have been unique in their almost exclusive reliance on DFI for acquiring the very latest technology as well as market access.

### 3. *New Role of DFI*

As observed in the previous section, the flow of foreign capital into Korea since 1962 has been overwhelmingly in the form of debt, not equity. As a result, Korea's foreign debt outstanding reached \$46.7 billion at the end of 1985. However, in the 1980s and in the years to come, Korea needs to maximize the inflow of technology-embodied foreign capital as it continues to shift its industrial structure toward a more technology- and skill-intensive orientation.

Along with the comprehensive trade liberalization program started in the early 1980s, the government has improved the business environment for foreign investors in Korea. Important policy changes in this regard and the results of these changes are as follows: first, in January 1984 the government switched from a positive to a negative list system in recording

<sup>8</sup> Westphal Larry E., Rhee Y.W. and G. Pursell (1981), *Korean Industrial Competence: What it came from*, World Bank Staff Working Paper No. 459, July 1981, p. 65.

those industries in which foreign investment is either prohibited or restricted; second, the approval procedure was greatly simplified through the implementation of an automatic system; and third, 100-percent foreign ownership in joint ventures will now be permitted in some cases.

As a result of the liberalized DFI act, foreign investors are free to invest in 762 out of a total of 999 sectors under the Korean Standard Industrial Classification. Within manufacturing, the foreign investment liberalization ratio to date has risen to 92.5 percent, with 483 out of 522 sectors open to foreign investors. Even in the sectors liberalized for DFI, however, equity transactions by foreigners are still restricted when the foreign equity participation ratio is above 50 percent.

The effects of the liberalization of DFI are clearly evident in the share of DFI in total long-term capital inflow, which has jumped from 2.7 percent for the 1977-83 period to 4.4 percent since 1984. Here again, it should be noted that Korea's recent liberalization of DFI restrictions was designed to maximize DFI's potential contribution to shifting the industrial structure toward greater technological sophistication. In line with the various liberalization programs, the government also made some policy changes associated with the operation of foreign banks in Korea. The liberalization of the financial market is still in progress.

## V. Some Comparisons with DFI in Latin America

It is interesting to compare the role of DFI in Korea to its role in some Latin American Countries. A cross-country comparison in Table 7 reveals some differences between Korea and three Latin American countries. First, the three Latin American countries have had relatively large DFI compared to Korea, in magnitude as well as in percentage of net foreign capital inflow. The comparison of rates of profit repatriation also indicates far higher levels for Mexico, Brazil and Colombia than for Korea.

Historically, the great surge of DFI in Latin America took place between 1940-60 and was closely linked to the strategy of the import-substituting industrialization (ISI). Industrial production as a whole was geared primarily to the domestic market, and most MNC investment was undertaken to meet local demand, taking advantage of government protection of local markets.

Since the middle-1960s, however, the inefficiency of ISI has become increasingly evident. Under ISI strategies, imports of equipment, raw materials, and intermediate inputs have risen rapidly, as have outflows of profits, royalties, and interest payments. These have led to growing

**Table 7**  
**COMPARISONS OF FOREIGN DIRECT INVESTMENT BETWEEN**  
**KOREA AND LATIN AMERICAN COUNTRIES**

Country	GNP (1976 billions of dollars)	Net Foreign Direct <sup>a</sup> Investment				Profit Repatriations from Direct Foreign Investment (1972-76)	
		Millions of Dollars		% of Net Foreign <sup>b</sup> Capital Inflow		% of	% of
		(1967-71)	(1972-76)	(1967-71)	(1972-76)	GNP	Exports
Korea	25.3	120.1	460.2	3.7	7.9	0.1	0.4
Brazil	143.0	1,483.5	6,158.3	33.8	22.9	0.5	6.5
Colombia	15.7	232.1	148.3	21.4	10.2	0.7	3.9
Mexico	65.4	1,283.9	2,617.5	36.6	16.0	1.2	12.5

Source: World Bank, "Consolidated Balance of Payments," May 19, 1978.

<sup>a</sup> Net of capital repatriations but not of profit (plus dividends) repatriations.

<sup>b</sup> Net of principal repayments but not of interest payments.

foreign indebtedness and balance-of-payment difficulties, which have been major causes of the current Latin American economic crisis.<sup>9</sup>

Unlike Korea, Latin America received much DFI during the ISI period through international subcontracting to subsidiaries of the large MNCs. Subsequent export promotion by DFI in Latin America took place within a similar framework. Korea, on the other hand, has started to export complete automobiles produced by wholly domestic firms with no involvement by the large MNCs. Korea's approach undoubtedly means slower growth of automotive exports and higher costs in the short run. But in the long run, having an independent sector under wholly Korean management may well pay off.

The share of DFI in total foreign capital has been much smaller in Korea than in Latin American countries. This is largely because in general, the Korean government has placed much more severe restrictions on the introduction of foreign capital than have its Latin American counterparts. As a result, foreign investment has played a far more important role in the development of the industrial structure in Latin America than it has in Korea. A natural consequence is that foreign penetration into dynamic sectors of the economy is much more significant in Latin America than in Korea.

<sup>9</sup> Jenkins, R. "Export Performance of Multinational Corporations in Mexican Industry," *Journal of Development Studies*, Vol. 15, No. 3, April 1979.

## VI. Conclusion

In the case of Korea, foreign investment policies have been formulated to be compatible with the indigenous development strategies. Korea's export-led industrialization has overwhelmingly been directed and controlled by Koreans. DFI has played only a marginal supportive role not only in investment finance, but also in technology transfer and export promotion.

Korea has relied on indigenous efforts to gain industrial competence through various forms of learning by doing and has emphasized transactions at arm's length in the use of foreign resources. Korea's abundance of entrepreneurial resources in industry as well as in government has made much of this possible. Transfer of technology from abroad constitutes only the initial stage in acquiring technological mastery. Of far greater importance are local efforts to adopt the technology that is transferred and to apply the mastery in other undertakings, thereby fostering locally based innovative activity.<sup>10</sup>

Relatively little reliance on DFI in Korea during the industrial transformation process could be explained by the tremendous efficacy of export activity as a means of acquiring industrial competence. Merely through export activity, Korean firms have enjoyed costless access to a wide range of information and have been oriented toward international standards in changing product design, upgrading quality, and improving management practices.<sup>11</sup> The Korean case demonstrates clearly that an abundance of skilled labor and of entrepreneurial talent is very important in achieving rapid economic growth through rapid indigenous mastery of foreign technologies.

<sup>10</sup> See Westphal et. al. (1981), pp. 66-72.

<sup>11</sup> For the relative advantages of outward-looking export promotion over import substitution, see Krueger (1983).



## References

- Ahn, Choong Yong, "Economic Development of South Korea, 1945-1985: Strategies and Performance" *Korea & World Affairs*, 10, 1, Spring 1986.
- \_\_\_\_\_, "Structural Characteristics of Latin American Economy," A paper Presented at the Plenary Session of the Second International Korean Economists Meeting, August 1986, 18-19, Seoul, Korea.
- Bank of Korea, *Weekly Domestic and Foreign Economy*, # 1284, September 1986, 13.
- Caves, Richard E., "International Corporation: The Industrial Economics of Foreign Investment," *Economica*, 1971.
- Economic Planning Board, *Major Statistics of Korean Economy*, Various Years.
- Fishlow, Albert, "The State of Latin American Economics," *Economic and Social Progress in Latin America*, Inter-American Development Bank, 1985.
- Gillis, M., et. al., *Economics of Development*, W.W. Norton & Company, Inc. 1983.
- Jenkins R., "Export Performance of Multinational Corporations in Mexican Industry," *Journal of Development Studies*, 15, 3, April 1979.
- Koo Bohn-Young, "Industrial Structure and Foreign Investment: A Case Study of their Interrelationship for Korea," *Working Paper 8402*, Korea Development Institute, 1984.
- Krueger, Anne O., "The Effects of Trade Strategies on Growth" *Finance & Development*, 20, 2, June 1983.
- United Nations, Economic and Social Commission on Transnational Corporations, *Transnational Corporations in World Development: A Re-examination*, New York, 1978.
- Vernon, Raymond, "International Investment and International Trade in the Product Cycle," *Quarterly Journal of Economics*, 1966, 190-207.
- Westphal, L.E., Y.W. Rhee & G. Pursell, *Korean Industrial Competence: Where It Came From*, World Bank Staff Working Paper, 649, July 1981.
- World Bank, *World Development Report 1985*, 1985.

