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I. Introduction

An increase in foreign direct investments (FDI) by some less-developed countries (LDCs) from the 1970s quickly attracted much scholarly interest. Dubbed the "multinationalization of third world firms," it presented difficult theoretical problems that stimulated the rethinking of earlier concepts of direct investment.

The "Third World" that is promoting "multinationalization" consists of three major regions: 1) East Asia's newly industrializing countries (NICs) – Hong Kong, Singapore, Taiwan and the Republic of Korea (ROK); 2) some Latin American countries – especially Argentina, Brazil and Mexico; and 3) India.

This article is an attempt to delineate several types of foreign direct investment by less-developed countries. FDI by India, S. Korea and Taiwan are contrasted to describe their special characteristics.

India, S. Korea and Taiwan were chosen because they permit a detailed comparison of economic development strategies by LDCs. India is a model of import-substitution policies, while S. Korea and Taiwan pursue export-promotion policies. Regarding inducement of foreign capital and technology, S. Korea and Taiwan are remarkably "liberalized," while India still enforces stringent "regulation." Despite these differences, from the 1970s the three countries each carried out enormous FDI. Why did this happen? What kinds of interrelationship can be found between economic development strategy and the pattern of FDI? This article attempts to answer these questions.

II. The Size of FDI from India, S. Korea and Taiwan

Figure 1 shows changes in the cumulative number of approved FDI from India, S. Korea and Taiwan. In 1975, India was far ahead with 233, while Taiwan had 95 and S. Korea had 82. But in 1976, S. Korea, with a total of 128, surged past Taiwan's 103. The remarkable growth in S. Korea's investments continued, reaching 458 by 1982, almost equal to India's 473. By the same year, Taiwan's total had reached only 167; it has fallen far behind both India and S. Korea. In the 1970–82 period, S. Korea's approved number of FDI had increased by almost 42 times and it would soon surpass that of India.

A comparison of India and S. Korea's outstanding number (Figure 2) shows that in 1978, S. Korea with 220 had already surpassed India.[1] S. Korea widened the gap

and by 1982 had 352 compared to India's 228. Of Taiwan's 124 approved number by 1978, the withdrawal of 27 has been confirmed;[2] there were 97 outstanding projects at the end of 1978. Estimating a 20% withdrawal rate, there were about 140 outstanding projects by 1982. Taiwan was well behind S. Korea and India.

Figure 3 shows the three nations' cumulative amount of approved FDI. The trend seen in Figure 1 is even clearer here. Most noteworthy is the remarkable increase in S. Korea's investment amount in a very short period. During 1970–82, S. Korea's cumulative approved amount rose by 45.4 times, from $7.45 million to $338.41 million, surpassing Taiwan in 1971 and India in 1978. In 1982, S. Korea's cumulative approved amount was slightly more than 2.7 times Taiwan's.

A comparison of the outstanding amount of FDI (Figure 4) shows that here also S. Korea exceeded India in 1972. By 1982, S. Korea's outstanding amount was $289.56 million, 1.9 times India's total of $150.5 million. The 1978 data for Taiwan is presented by Enatsu (1982). According to Enatsu, in 1978 Taiwan's approved amount of FDI had reached $49,896,000, from which $760,000 had been withdrawn. Thus Taiwan's outstanding amount in 1978 was $49,136,000. These figures indicate almost a 15% withdrawal rate. We can estimate that Taiwan's outstanding amount in 1982 was about $105 million, and that S. Korea's outstanding amount was about 2.8 times Taiwan's.

Finally, we shall compare the average investment size per project. Taiwan has the largest at $741,100 (approval basis), with S. Korea very close behind at $738,900 (approval basis). There is hardly any difference between the two countries. (Actually, S. Korea's average investment per project on an outstanding basis in 1982 was $823,000 which is higher than Taiwan's.) By comparison, India's effective projects (projects in operation plus projects under implementation) on July 1, 1982 had an average investment of $660,000, considerably less than for Taiwan or S. Korea. If the projects in operation are used for the base figure, Indian average investment is even less, only $430,700.

III. Georgraphical Distribution of FDI from India, S. Korea and Taiwan

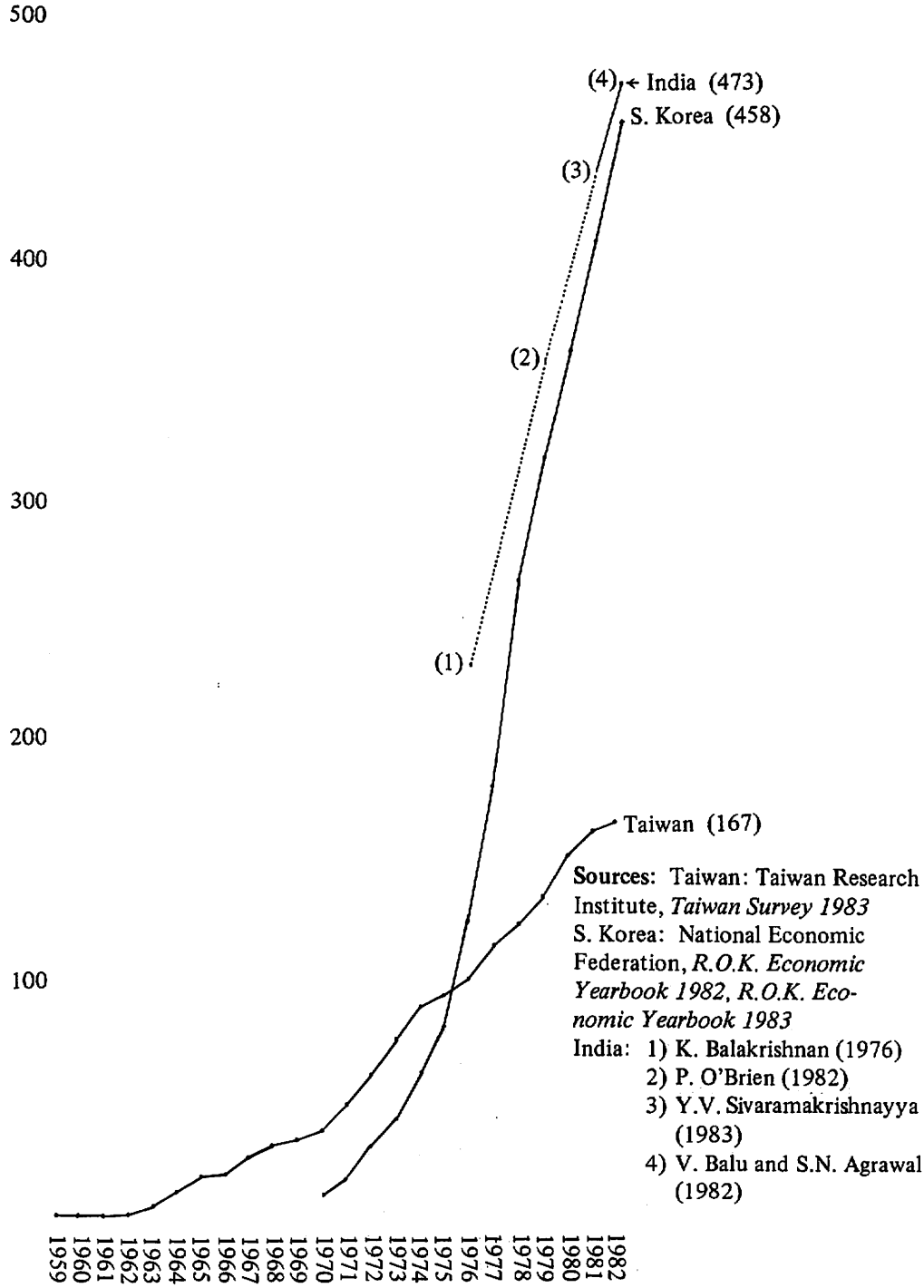
Table 1 shows the three countries' FDI patterns by region. The major characteristics are summarized below.

S. Korea

1) S. Korea's FDI are concentrated in about equal ratios in the United States and Southeast Asia; these are S. Korea's two principal investment areas. However, compared to Taiwan and India, S. Korean investments are widely dispersed throughout the world.

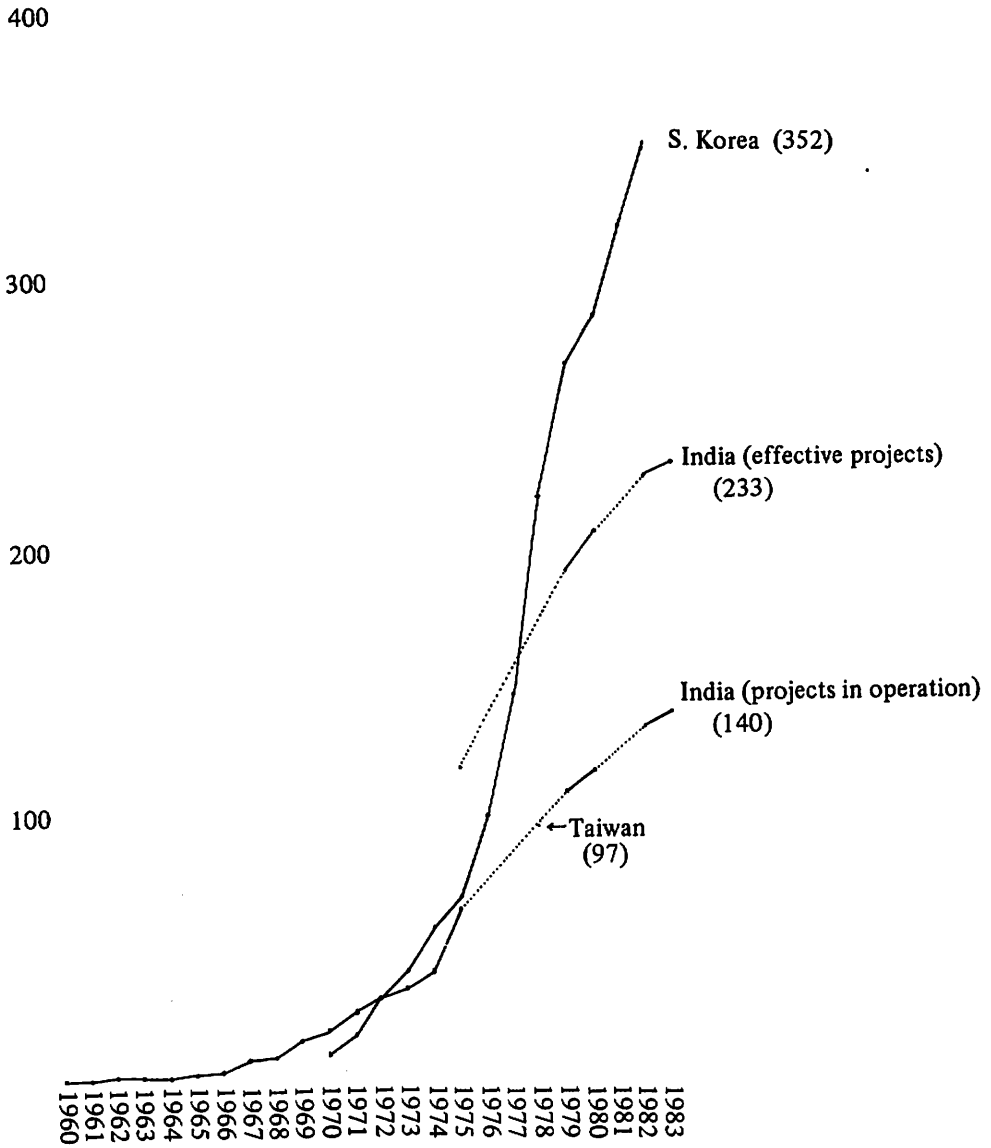
2) The changes in cumulative number of investments by area (Figure 5) show that until 1976 most were in Southeast Asia. However, after 1976 investment projects in the United States increased markedly; they exceeded those in Southeast Asia from 1977, and the United States became the major site. Investments in Europe also increased rapidly between 1976–78. The number of investments in the developed countries by 1982 was 209, or 45.6% of all cases. This ratio is much greater than Taiwan and India's. In addition, S. Korea's investments in the Middle East, reflecting the construction boom in the region, increased notably from 1977.

Figure 1. Cumulative number of approved FDI by India, S. Korea and Taiwan.



Sources: Taiwan: Taiwan Research Institute, *Taiwan Survey 1983*
S. Korea: National Economic Federation, *R.O.K. Economic Yearbook 1982, R.O.K. Economic Yearbook 1983*
India: 1) K. Balakrishnan (1976)
2) P. O'Brien (1982)
3) Y.V. Sivaramakrishnayya (1983)
4) V. Balu and S.N. Agrawal (1982)

Figure 2. Outstanding number of FDI by India, S. Korea and Taiwan.



Sources: S. Korea: *R.O.K. Economic Yearbook, 1982; R.O.K. Economic Yearbook, 1983.*

India: 1970-75, K. Balakrishnan (1976);
1979, Ram Gopal Agraal (1981);
1980, Indian Investment Centre (1981);
1982, Y.V. Sivaramakrishnayya (1983);
1983, *Economic Times*, April 10, 1983

Taiwan: K. Enatsu (1981).

Figure 3. Cumulative amount of approved FDI by India, S. Korea and Taiwan
(Unit: $10,000)

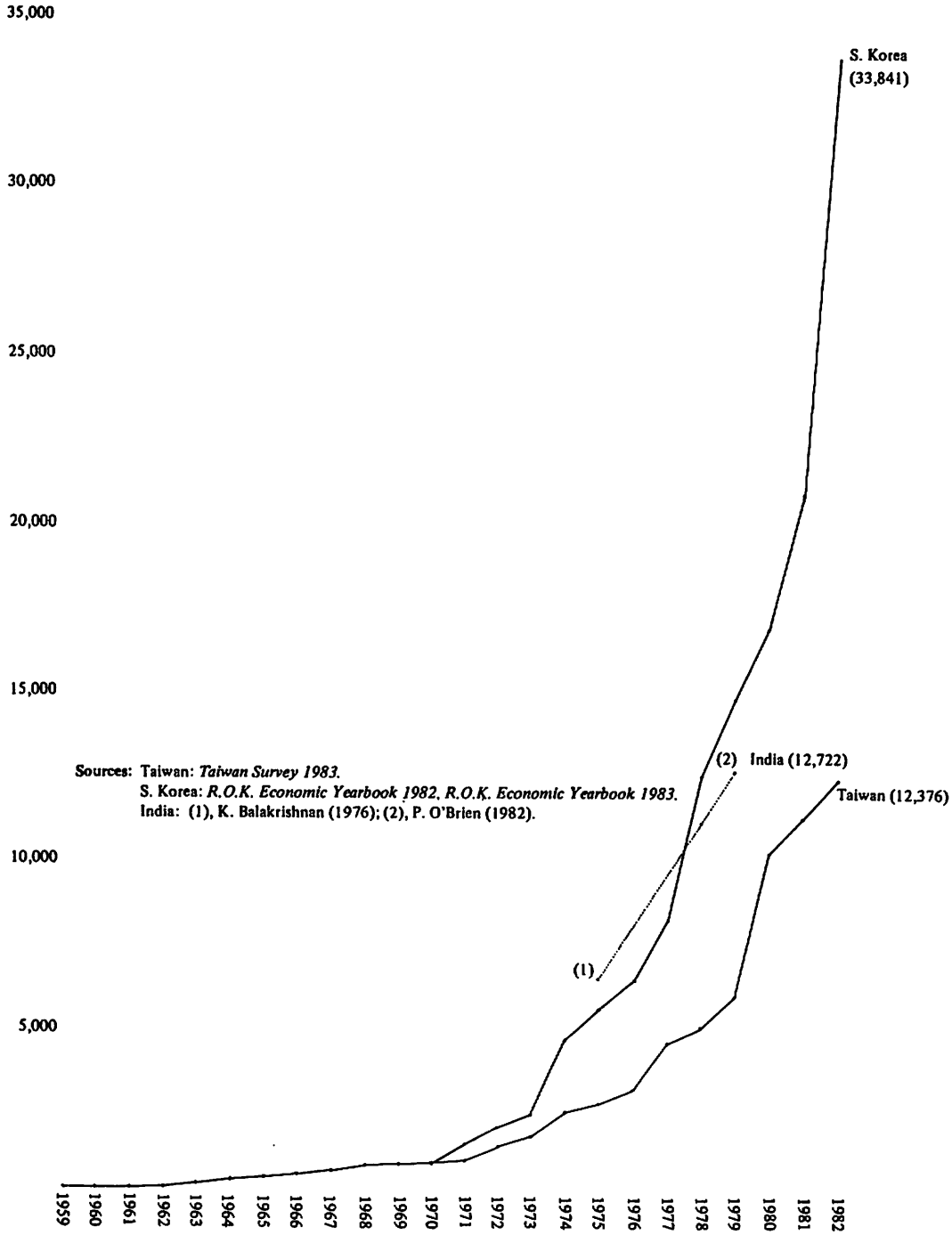
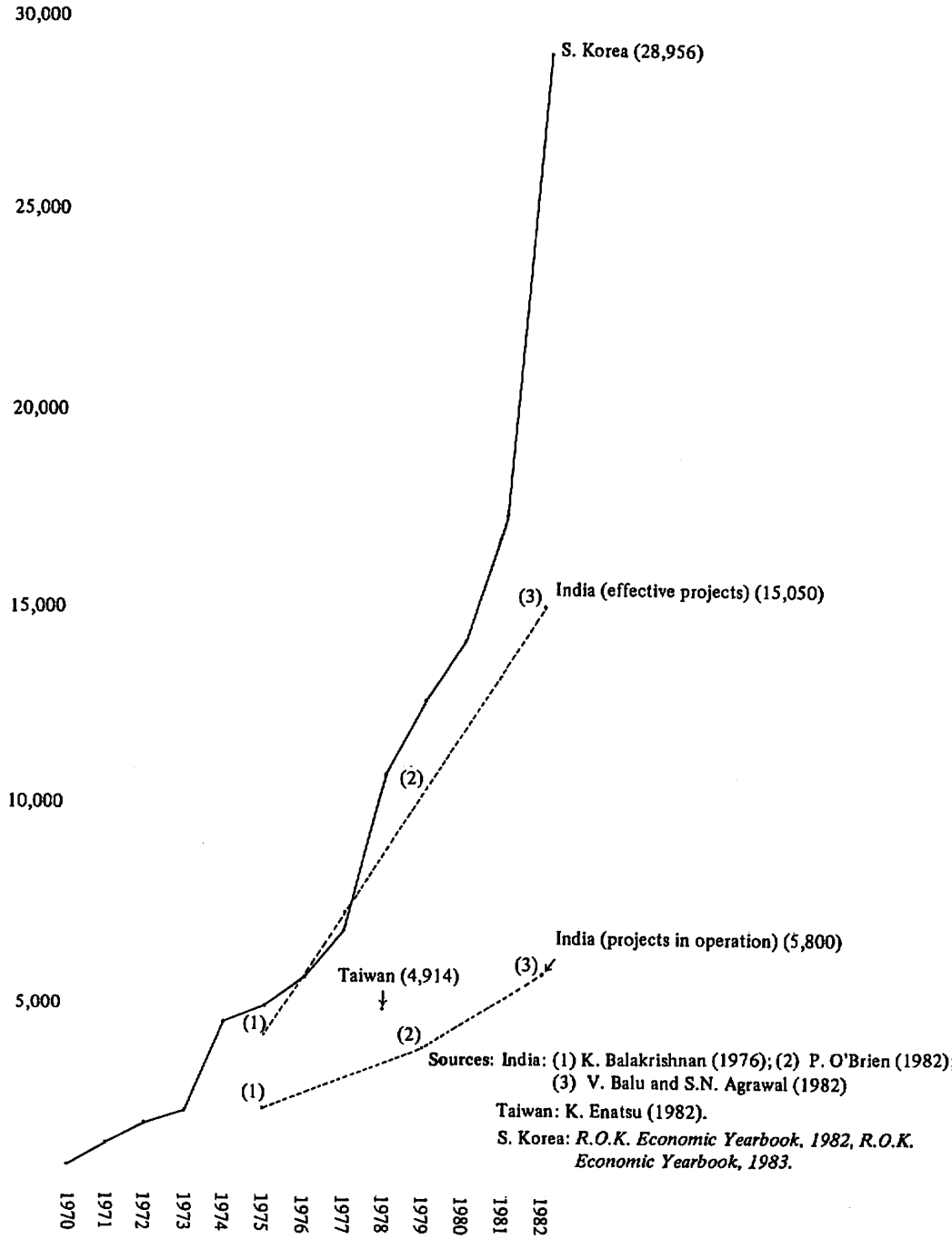


Figure 4. Trends in outstanding FDI amount of India, S. Korea and Taiwan
(Unit: $10,000)



Sources: India: (1) K. Balakrishnan (1976); (2) P. O'Brien (1982);
(3) V. Balu and S.N. Agrawal (1982)
Taiwan: K. Enatsu (1982).
S. Korea: *R.O.K. Economic Yearbook, 1982, R.O.K. Economic Yearbook, 1983.*

3) Figure 6 shows S. Korea's cumulative FDI amount by region. Southeast Asia consistently had the largest share, with particularly high growth rates in 1974–75, 1978 and 1981–82. However, North America was the area of greatest increase. In 1982, the investment amount rose to almost the same level as Southeast Asia. The increase was especially striking in 1982 – reaching $47.12 million. This amount was greater than all investment up to 1981 in this region, which totalled $39.96 million.

There was hardly any investment in Oceania until 1979. In 1981–82, investment rose sharply; the total for the two-year period was $5.22 million.

Investment in Latin America rose rapidly from 1979, with particularly fast growth in 1981–82. The total for this two-year period was $32.05 million. Investment in the Middle East also showed a broad upturn from 1978 (however, there was a rapid decrease in 1981 due to the oil crisis).

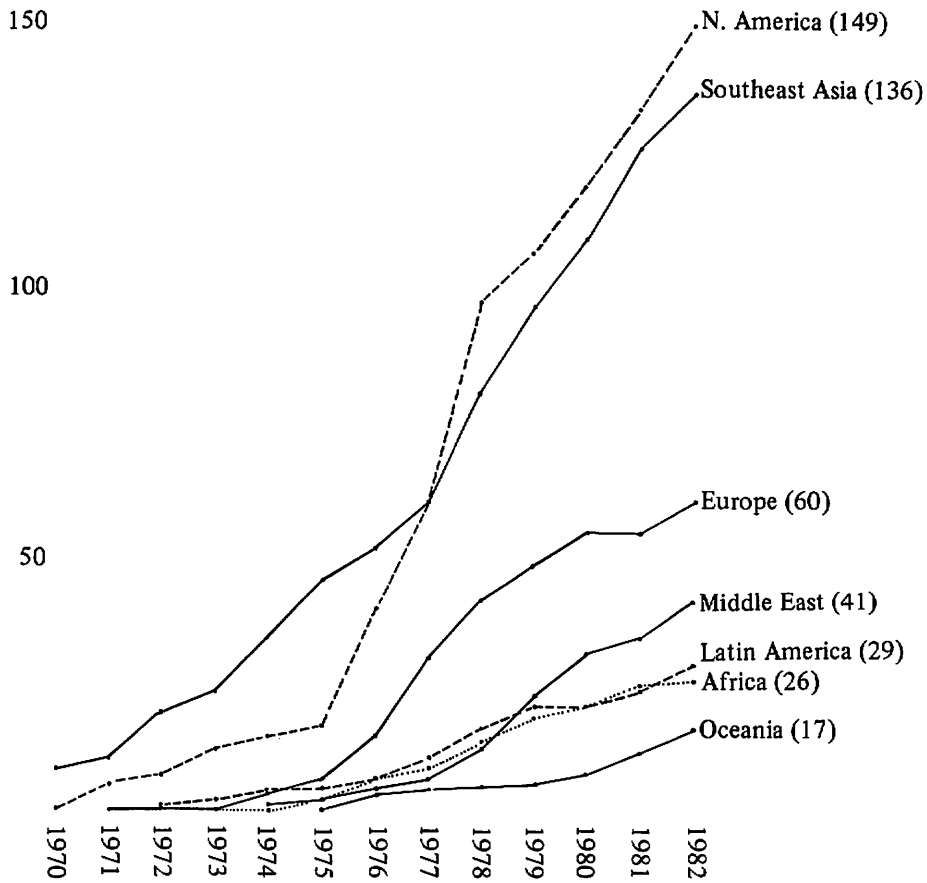
Table 1. Regional Investment Patterns of India, S. Korea and Taiwan (1982)

	India	S. Korea	Taiwan
A. Investment number (%)	100.0	100.0	100.0
1. Southeast Asia (ASEAN)	45.5	29.7	48.5
2. Middle East	11.2	9.0	n.a.
3. Africa	17.2	5.7	n.a.
4. Oceania	1.5	3.7	n.a.
5. Latin America	–	6.3	n.a.
6. North America	6.7	32.5	18.0
7. Europe	9.7	13.1	n.a.
8. Others	8.2	–	33.5
B. Investment amount (%)	100.0	100.0	100.0
1. Southeast Asia (ASEAN)	61.0	26.4	36.9
2. Middle East	2.2	9.3	n.a.
3. Africa	33.5	8.0	n.a.
4. Oceania	0.4	16.0	n.a.
5. Latin America	--	11.8	n.a.
6. North America	0.5	25.7	38.9
7. Europe	1.3	2.8	n.a.
8. Others	1.1	–	n.a.
C. Average investment per project ($1,000)	430.7	738.9	741.1
1. Southeast Asia (ASEAN)	577.6	658.0	563.6
2. Middle East	85.7	765.6	n.a.
3. Africa	840.4	1,041.8	n.a.
4. Oceania	113.0	3,188.0	n.a.
5. Latin America	–	1,372.7	n.a.
6. North America	29.5	584.4	1,603.7
7. Europe	59.7	156.1	n.a.
8. Others	54.1		535.7

There was a large-scale increase in investments in Africa in 1976–78, but thereafter it remained low. The data show that S. Korea lost interest in Africa. While investment in Europe showed a stable upward trend, the scale was small and it is a relatively unimportant region for S. Korea. S. Korea's direct investments are overwhelmingly made in the United States.

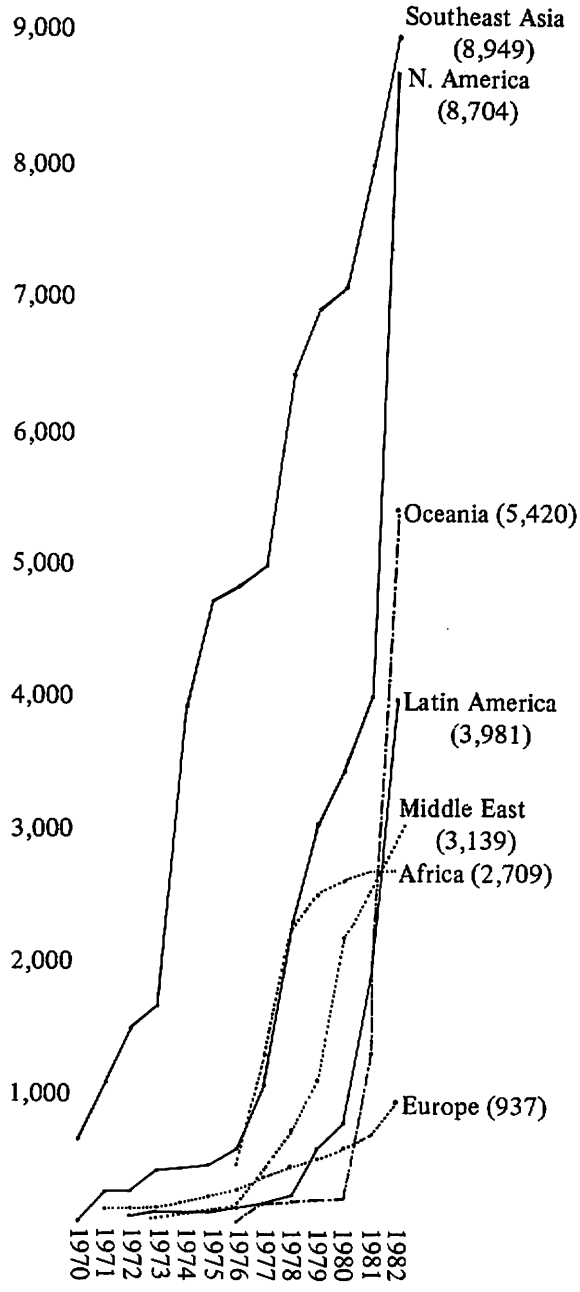
4) S. Korea's investments have registered three peaks – 1974, 1978 and 1982. The principal reason for the 1974 peak was a very sharp surge in investments in Southeast Asia. In 1978 investments in Southeast Asia, N. America, Africa and the Middle East all rose rapidly. The 1982 high was sustained by a jump in investments in N. America, the Middle East and Oceania.

Figure 5. S. Korean cumulative FDI number by region



Source: Appendix 2

Figure 6. S. Korean cumulative FDI amount by region
(Unit: $10,000)



Source: Appendix 2

The 1978 peak seems to best illustrate S. Korea's FDI characteristics: simultaneous development of FDI with diverse objectives. That year S. Korea invested in trade and marketing industries in the developed countries, in manufacturing industries in Southeast Asia and Africa, and in the construction industry in the Middle East. In 1982, Investments in Oceania and Latin America to acquire natural resources also swelled the total and marked the emergence of a four-variety type of FDI.[3] S. Korea's case can be called a "simultaneous, multi-faceted direct foreign investment." It reflects national economic development strategy and is a manifestation of the multi-faceted production pattern of each S. Korean industrial group.

5) By average investment per project, the amounts for developed countries are relatively small; the average for Europe is extremely small. This is probably because of the high ratio of investments in the trade and marketing sectors. By contrast, the average investment per project in Oceania was very large, probably because of the high ratio for acquisition of natural resources.

A comparison by region of average investment shows that Taiwan's average of $1,603,700 for the United States is much higher than S. Korea's $584,400. But for ASEAN, S. Korea's average of $658,000 tops Taiwan's figure of $563,600. Regarding India, S. Korea's average investment is larger in every region; the discrepancy is especially great for the Middle East, developed countries and Oceania.

Taiwan

1) As with S. Korea, Taiwan's two major investment areas are the United States and ASEAN. In 1982, 18% of the total number of investment were in the United States, compared to 48.5% for ASEAN, which was by far the highest ratio. Taiwan's percentage for ASEAN almost matched India's (45.5%) but the percentage for the United States was considerably lower than S. Korea's (32.5%).

2) Investment amount by area for 1982 shows that the United States was the top region with 38.9% of the total compared to 36.9% to ASEAN. This ratio to the United States was considerably higher than S. Korea's 25.7% and far greater than India's mere 0.5%.

3) Taiwan's average investment per project in the United States was $1,603,700, much larger than the average for ASEAN of $563,600. Furthermore, the average investment in the United States was much larger than those of S. Korea ($584,400) or India ($29,500) and is one distinctive feature of Taiwan's FDI. The reason for this difference is that Taiwan's investments in the United States are not limited to trade and marketing sector but include large-scale investments in the manufacturing sector.

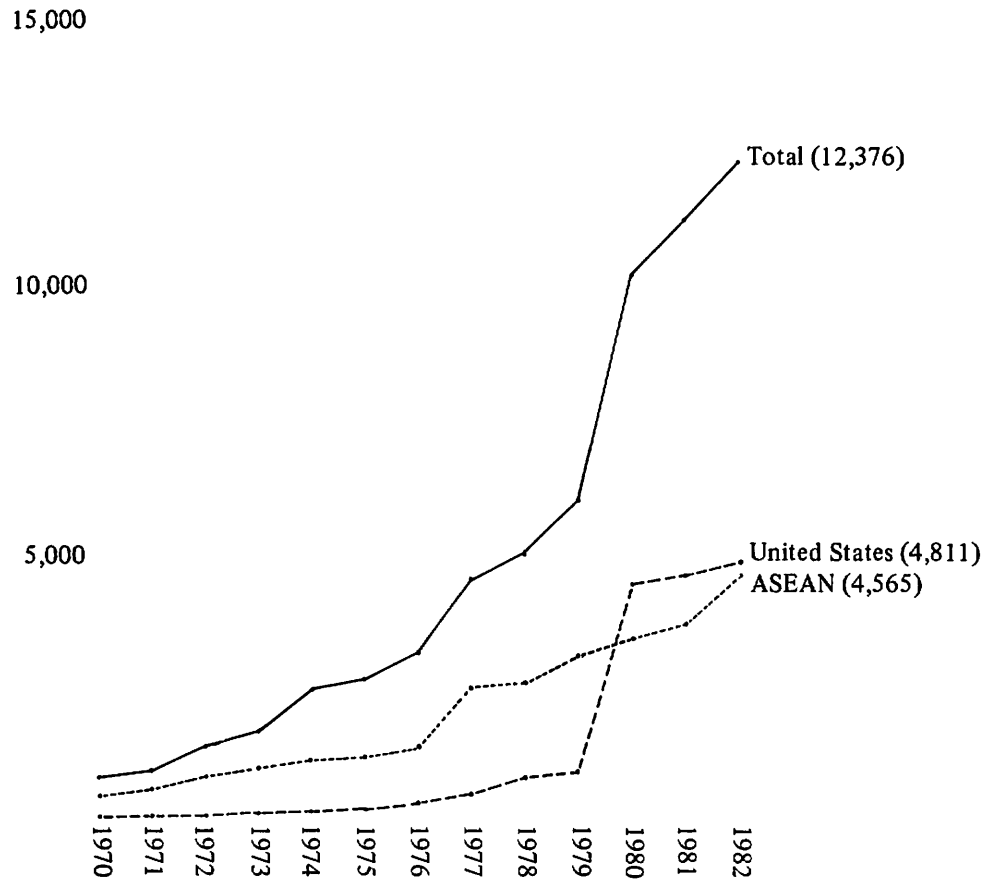
4) By period, Taiwan's investments until 1979 were concentrated in ASEAN. But in 1980 the amount invested in the United States suddenly surpassed the figure for ASEAN. This was a turning point in Taiwan's FDI (see Figure 7). The only ASEAN countries where Taiwan's investments increased from 1980 were Singapore and Indonesia.

These data show the improved international competitiveness of Taiwan's enterprises. This should not be exaggerated, however, since Taiwan's total number and amounts of FDI were small compared to those of S. Korea and India. Furthermore, investments in the United States declined severely from 1981. This trend alone suggests that it would be dangerous to claim that Taiwan's FDI was now concentrated in the developed countries.

India

1) India's major investment areas are Southeast Asia and Africa, quite different from the Southeast Asia/United States pattern of S. Korea and Taiwan. In 1982, 45.5% of total investment number and 61.0% of total investment amount was in Southeast Asia; 17.2% of total investment number and 33.5% of total investment amount was in Africa. Malaysia, Kenya and Indonesia are the top three countries with 77.3% of India's total investment amount. The next three are Singapore, Nigeria and Thailand. A total of 92.1% of India's investments are concentrated in these six nations (see Table 2).

Figure 7. Taiwan's cumulative FDI amount by region
(Unit: $10,000)



Source: Appendix 4

Table 2. Indian Foreign Direct Investment (April 1, 1982)

Rank[1]	Country	Number: Projects in operation	Number: Projects under implementation	Number: Projects approved Jan.-June 1982	Number: Total	Country	Investment amount (Rs. 1,000)[2]	%
1	Malaysia	28	3	0	31	Malaysia	125,778	27.2
2	Singapore	14	9	2	25	Kenya	121,636	26.3
3	Indonesia	12	4	2	18	Indoensia	109,377	23.7
4	Kenya	10	2	1	13	Singapore	26,828	5.8
5	U.K.	9	5	2	16	Nigeria	26,181	5.6
6	U.A.E.	9	4	0	13	Thailand	15,367	3.3
7	U.S.A.	9	2	1	13	U.A.E.	5,286	1.1
8	Sri Lanka	7	11	1	19	Philippines	4,498	1.0
9	Nigeria	6	10	3	19	W. Germany	4,040	0.9
10	Thailand	5	5	1	11	Saudi Arabia	3,948	0.9
11	Mauritius	5	1	0	6	Mauritius	3,509	0.8
12	Saudi Arabia	3	2	2	7	Uganda	2,807	0.6
13	Philippines	2	1	0	3	Sri Lanka	2,611	0.6
14	W. Germany	2	1	0	3	U.S.A.	2,127	0.5
15	Hong Kong	2	0	1	3	U.K.	1,529	0.3
16	Nepal	1	7	0	8	Nepal	1,462	0.3
17	Kuwait	1	2	1	4	Fiji	1,122	0.2
18	Oman	1	1	1	3	Oman	798	0.2
19	Baharain	1	1	0	2	Australia	685	0.1
20	Netherlands	1	1	0	2	Botswana	500	0.1
21	Bangladesh	1	0	0	1	Bangladesh	400	0.1
22	Botswana	1	0	0	1	Netherlands	375	0.1
23	Uganda	1	0	0	1	Hong Kong	286	0.1
24	Australia	1	0	0	1	France	262	0.1
25	Fiji	1	0	0	1	Kuwait	147	Neg.
26	France	1	0	0	1	Baharain	110	Neg.
27	Greece	0	2	0	2			
28	Cyprus	0	1	0	1			
29	Libya	0	1	0	1			
30	Seychelles	0	1	0	1			
31	Senegal	0	1	0	1			
32	Sudan	0	1	0	1			
33	Zambia	0	1	0	1			
34	Yugoslavia	0	1	0	1			
35	Tonga	0	1	0	1			
36	Switzerland	0	1	0	1			
37	Tanzania	0	1	0	1			
	Total	134	84	18	236		461,669	100.0

(1) Ranking is by projects in operation.
(2) Investment amounts are for 134 projects in operation only.
Source: Compiled from Appendix 1.

2) However, a comparison of 1976 (Table 3) and 1982 shows that India's investments in ASEAN were changing from predominantly in Malaysia to a dispersed pattern of investment in each country except the Philippines. During this period, investment in Singapore and Indonesia greatly increased.

3) Kenya was the African country where India invested most, and there was steady expansion. India also greatly increased investments in Nigeria from 1976–82.

One reason for the concentration of Indian investments in Southeast Asia and certain African countries is the presence of overseas Indians.[4] Ethnic ties are also

Table 3. Indian Foreign Direct Investment by Region/Country, As of Jan. 1, 1976 (Projects in operation only)

Region/Country	Number		Amount		Rank
	Number	%	Rs. 1,000	%	
East Asia	(1)	(1.5)	(550)	(0.3)	
1. Hong Kong	1	1.5	550	0.3	17
Southeast Asia	(31)	(47.7)	(96,388)	(54.3)	
2. Malaysia	23	35.4	77,602	43.7	1
3. Indonesia	3	4.6	10,650	6.0	4
4. Singapore	1	1.5	1,280	0.7	13
5. Thailand	3	4.6	6,080	3.4	6
6. Philippines	1	1.5	776	0.4	14
South Asia	(4)	(6.2)	(712)	(0.4)	
7. Sri Lanka	3	4.6	584	0.3	16
8. Afghanistan	1	1.5	128	0.1	19
Middle East	(2)	(3.0)	(715)	(0.4)	
9. Iran	1	1.5	715	0.4	15
10. Doha (Qatar)	1	1.5	n.a.	–	
Africa	(16)	(24.6)	(52,094)	(29.4)	
11. Kenya	7	10.8	39,239	22.1	2
12. Mauritius	5	7.7	5,315	3.0	7
13. Nigeria	3	4.6	4,620	2.6	8
14. Uganda	1	1.5	2,920	1.6	9
Oceania	(1)	(1.5)	(1,810)	(1.0)	
15. Fiji	1	1.5	1,810	1.0	12
North America	(5)	(7.7)	(7,990)	(4.5)	
16. U.S.A.	4	6.2	490	0.3	18
17. Canada	1	1.5	7,500	4.2	5
Europe	(5)	(7.7)	(17,164)	(9.7)	
18. U.K.	3	4.6	2,325	1.3	10
19. W. Germany	1	1.5	12,530	7.1	3
20. Ireland	1	1.5	2,309	1.3	11
Total	65	100.0	177,423	100.0	

Source: K. Balakrishnan (1976)

a factor in Taiwan's investments in Southeast Asia. It should be pointed out, however, that the lack of ethnic ties is a reason for the wide dispersion of S. Korea's FDI.

4) India's investments increased in the Middle East in the latter half of the 1970s and in South Asia from the 1980s. The former trend reflects the construction boom in the recipient countries. The latter development was affected by political factors like the strengthening of India's political position in the non-aligned movement and the establishment of the South Asia Regional Corporation in which India played a central role.

5) While the number of investments in developed nations increased between 1976–82, the investment amount decreased. This means that the average investment per project shrank; the cause was that investments in the developed countries were increasingly limited to the service industries (especially hotels and restaurants.)

6) The average investment per project was much smaller than for S. Korea or Taiwan, and shows the small-business nature of India's FDI.

By area, average investment per project was large in Africa ($840,400) and Southeast Asia ($577,600), less-developed countries where investments were chiefly in the manufacturing industries. However, India's average investment in these two regions, too, was small-scale compared to S. Korea's, though for Southeast Asia it is slightly larger than Taiwan's.

India's average investment is small in all areas except Africa and Southeast Asia, and particularly small-scale in the developed regions like Europe and the United States. For example, the average in the United States is 1/20th that of S. Korea and 1/54th that of Taiwan.

IV. Industrial Distribution of FDI from India, S. Korea and Taiwan

Table 4 is a comparison of India, S. Korea and Taiwan's investment pattern by industry and shows the major features of their FDI.

S. Korea

1) A total of 75.7% of investment projects are in the service industry, far more than India's 33.6% and Taiwan's 28.7%. Investment projects in trade have reached 53.9% of the total. This figure is one indication of the government's export promotion policy.

2) Investment projects in the resource sector are 12.5% of the total, slightly more than double Taiwan's ratio (6.0%); India has no investments in this sector. Investment projects in construction and transportation are 14.6%. Investments in manufacturing industries are only 9.2%, far less than this sector's ratios for Taiwan of 74.3% and India of 66.4%.

S. Korea's pattern of such industrial investment can be denoted a one-set FDI model consisting of four varieties: export-promotion in the developed countries, construction in the Middle East, manufacturing in Southeast Asia and Africa and resource acquisition in Oceania and Latin America. But it must also be noted that all investments are developed as leverage to promote exports to developed countries' markets.

Table 4. Investment Patterns by Industry of India, S. Korea and Taiwan (1982)

	India		S. Korea		Taiwan	
A. Investment number (%)	100.0		100.0		100.0	
1. Resource sector	–		12.5		6.0	
2. Manufacturing	66.4	(100.0)	9.2		74.3	(100.0)
a. Textiles	14.2	(21.3)	n.a.		12.6	(16.9)
b. Engineering	28.4	(42.7)	n.a.		30.0	(40.3)
c. Chemicals	9.7	(10.9)	n.a.		5.4	(7.6)
3. Services	33.6		75.7	(100.0)	28.7	(100.0)
a. Construction, Transportation	> 17.9		14.6	(19.3)	3.6	(12.5)
b. Trade, Marketing			53.9	(71.2)	20.4	(70.8)
B. Investment amount (%)	100.0		100.0		100.0	
1. Resource sector	–		48.7		6.8	
2. Manufacturing	94.8	(100.0)	11.4		84.0	(100.0)
a. Textiles	30.7	(32.4)	n.a.		9.4	(11.2)
b. Engineering	20.1	(21.1)	n.a.		22.3	(26.6)
c. Chemicals	6.0	(6.3)	n.a.		30.8	(36.6)
3. Services	5.2		33.4	(100.0)	12.6	(100.0)
a. Construction, Transportation	> 2.2		12.9	(28.8)	1.6	(12.7)
b. Trade, Marketing			13.7	(30.7)	9.2	(73.4)
C. Average investment per project ($1,000)	430.7		738.9		741.1	
1. Resource sector	–		2,896.0		1,054.8	
2. Manufacturing	614.9		917.8		838.3	
a. Textiles	933.2		n.a.		554.0	
b. Engineering	304.5		n.a.		553.5	
c. Chemicals	265.4		n.a.		4,230.7	
3. Services	66.2		325.8		323.9	
a. Construction, Transportation	> 52.6		652.5		329.8	
b. Trade, Marketing			188.3		335.5	

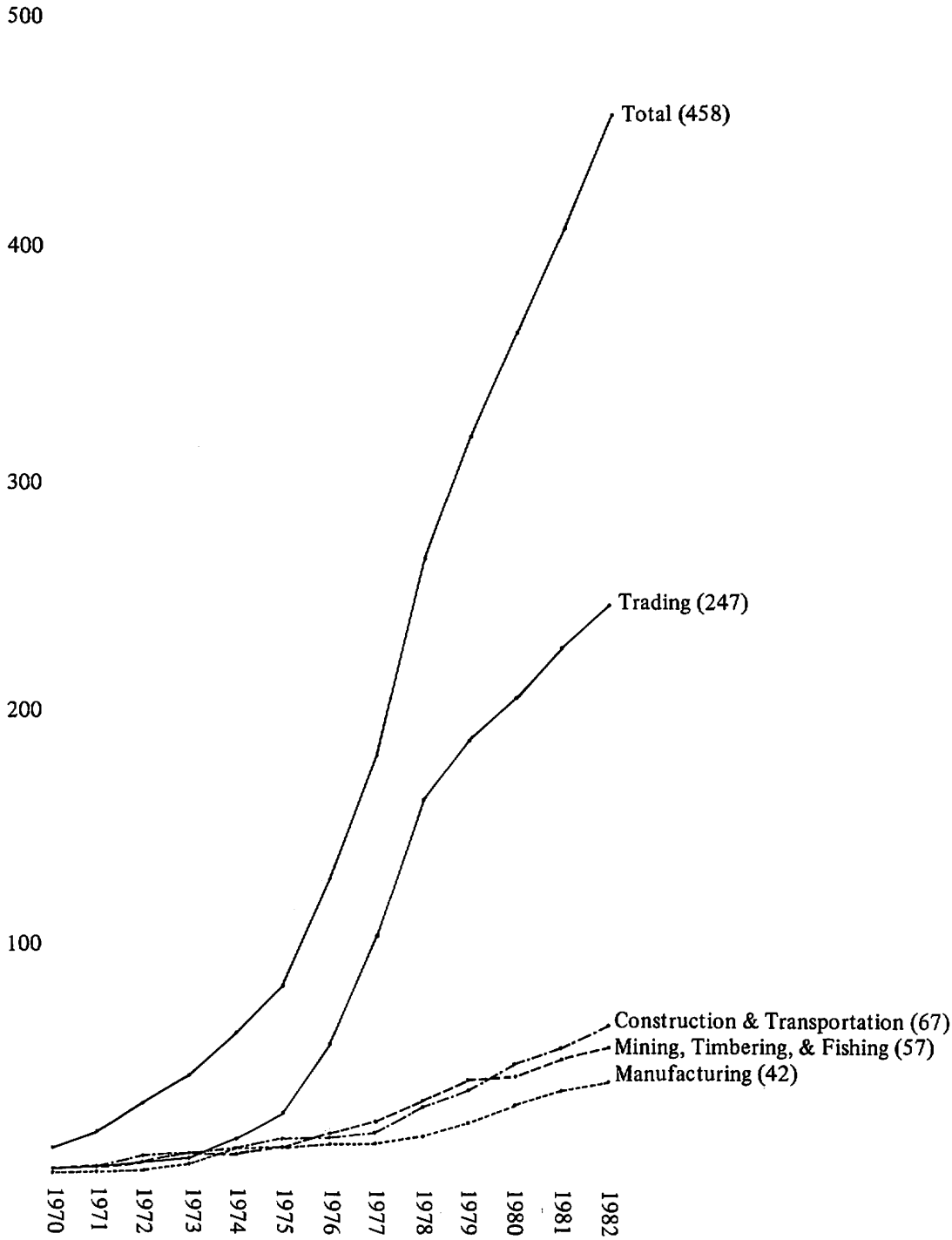
3) Figure 8 shows changes in FDI by industry. The number of investments in trade began to increase from 1974–75, then rose rapidly in 1976–78 and, although the rate of increase was slightly reduced, continued to show a high growth rate thereafter. There was a conspicuous gain in the number of investments to acquire resources from about 1975 and in the manufacturing and construction industries from about 1978.

In distribution of investments by industry, resource acquisition projects constitute 48.7%, the largest industrial category for S. Korea. The size of this ratio is another clear contrast with Taiwan and India. It also means that acquisition of resources is a must for S. Korea's export-led economic growth. The ratio of investments in the service industry is 33.4%, which is much higher than Taiwan's 12.6% and India's 5.2%. But the share for the manufacturing sector is only 11.4%, compared to 94.8% for India and 84.0% for Taiwan.

5) Figure 9 shows changes in the cumulative amount of FDI by industry. Investments in the resource acquisition sector rose at a fairly rapid rate from 1977 to 1979, and then grew remarkably in 1981–82 (particularly in 1982). Growth in the manufacturing, trade, construction and transportation sectors was slow compared to resource industries. Nevertheless, marked increases were recorded in the trade industry from 1976, and in manufacturing, construction and transportation from 1978.

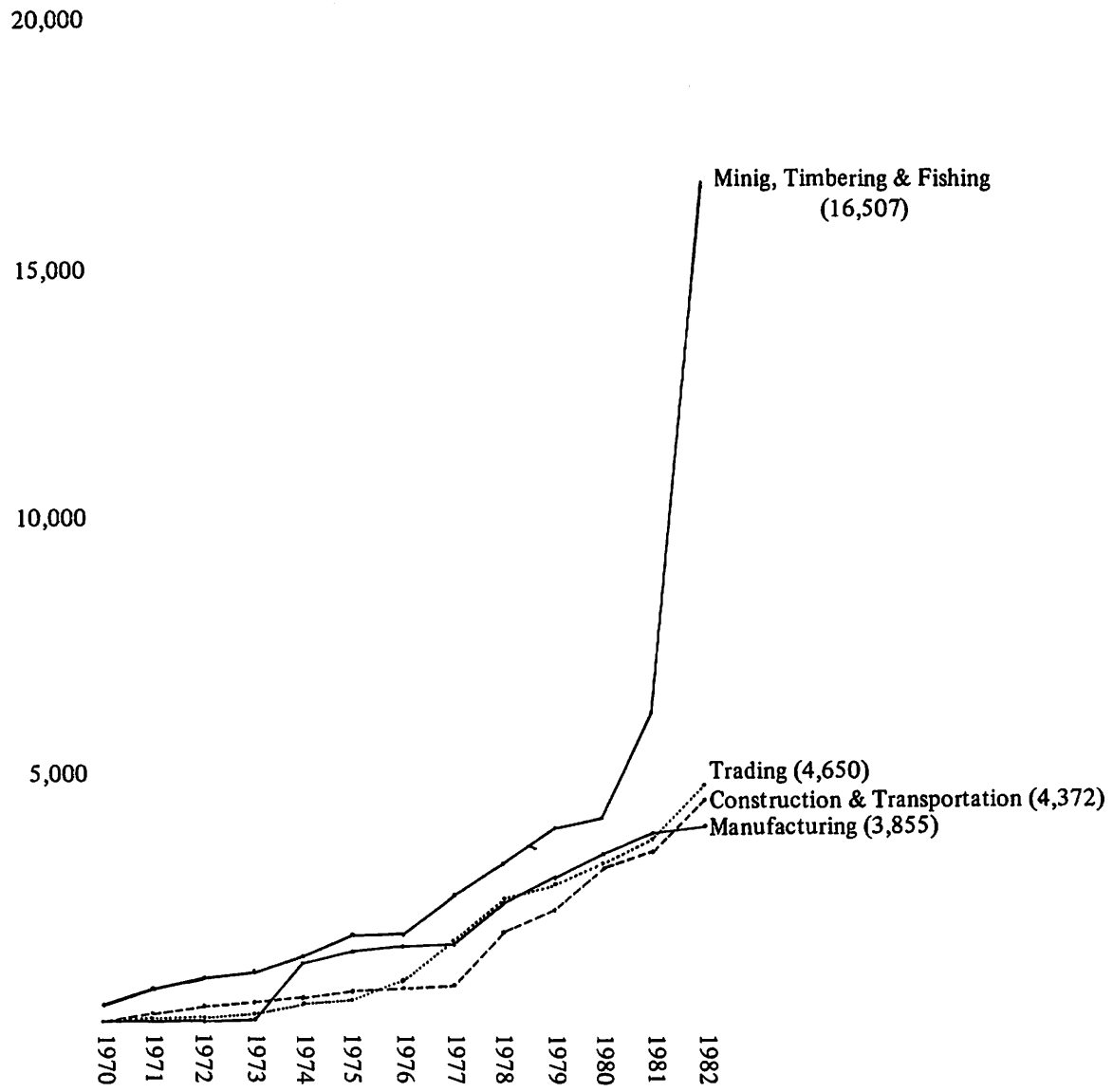
6) The average investment per project in the resources sector was $2,896,000, much larger than for other industries. The average for manufacturing was $917,800, and for the service industry it was $325,800. Taiwan's average investment per project for all industry was slightly larger than S. Korea's. But when the resources, manufacturing and service sectors are compared separately, S. Korea's average amount is larger than Taiwan's. Compared to India, S. Korea's average amount is much larger in all sectors.

Figure 8. S. Korean cumulative FDI number of industry



Source: Appendix 3

Figure 9. S. Korean cumulative FDI amount by industry
(Unit: $10,000)



Source: Appendix 3

Taiwan

1) The pattern by number of investments is totally different from S. Korea. The manufacturing sector received 74.3% of the total, more than the 66.4% for India. Among manufacturing industries, electronics/electrical equipment received the most projects, 12.6% of the total. Projects in the engneering industries, including electronics/electrical equipment, were 30% of the total, almost the same as for India. Investment projects in the service industry were 28.7%, far less than S. Korea's 75.7% and even lower than India's 33.6%. However, within the service industry, 70.8% were concentrated in trading and marketing. They constituted 20.4% of all projects. While this ratio is far less than S. Korea's, it is higher than India's.

2) The figures for total investments show that 84.0% is concentrated in manufacturing industries. This emphasis demonstrates, far better than the number of projects, that Taiwan's investment pattern is centered on manufacturing. The chemical industry is the largest investment field within the manufacturing sector with 30.8% of total investments and 36.6% of those in manufacturing. The engineering industry's ratio is also large – 22.3% of total investments and 26.6% of those in manufacturing. The textile industry has 9.4% of all investments and 11.2% of those in manufacturing.

Investments in the service industry constitute 12.6%, an intermediate ratio compared to S. Korea's 33.4% and India's 5.2%.

3) By region, 36.5% of total investment in manufacturing, and 65.5% of the total investment in the service industy is in the United States. The largest single investment in manufacturing there (and the largest of all Taiwan's FDI) is in the chemical industry where one project has $24 million. Excluding this one project, the average scale of investments in manufacturing in the United States is a mere $1,075,000. However, a feature of Taiwan's FDI which is apparent from a comparison with S. Korea and India is the higher dependence on the U.S. market. This is not simply a trade-base type investment. Another feature is the attempt to enlarge manufacturing-base investment to guarantee access to and a share of the U.S. market.

4) Regarding average investment per project in the United States, the scale for the manufacturing and service industries in the United States is very large compared to that for ASEAN, 4.3 times and 8.1 times, respectively. This comparison also demonstrates that Taiwan's FDI is a "U.S.-market dependent type."

India

1) Almost two-thirds – 66.4% – of investment projects are in manufacturing. Like Taiwan, India's FDI is a manufacturing-centered type. Within the manufacturing sector, the largest number of investment are in engineering industries, which constitute 42.7% of projects in the sector and 28.4% of all projects. Textiles rank second with 14.2% of all projects and 21.3% of those in manufacturing.

2) By region, 54 of the 89 investment projects were in Southeast Asia, and 19 were in Africa. The two regions account for 82.0% of the total. When six cases each in the Middle East and South Asia are included, 95.4% of the total are in these four areas. Nearly all India's investments in the manufacturing industry are in less-developed countries.

3) On the one hand, many investments in ASEAN, where the developing countries have a relatively high income level and industrialization is well underway, are in the "newly emerging industries" like engineering. On the other hand, many investments in African countries and in Indonesia, which have a relatively low income level and are not very industrialized, are in the "traditional industries" like textiles.

4) By contrast, of 45 investments in the service industry, 20, or 44.4%, are in the developed countries. But half of these, 10, are in hotels or restaurants; only 7 were to obtain sales bases.

5) A comparison of 1976 (Table 5) and 1982 shows that during this period Indian investment projects in manufactuirng fell from 87.7% to 66.4%, while the ratio for projects in the service indsutry rose from 12.3% to 33.6%. Indian investments have become diversified.

Table 5. Indian Foreign Direct Investment – Distribution by Broad Industry Classification, as of January 1, 1976

Industry Classification	Number in Production	%
[I] Manufacturing	57	87.7
1. Engineering & Electronics	23	35.4
2. Oils, Chemicals & Drugs	8	12.3
3. Textiles	13	20.0
4. Wood, Pulp, Paper Products	4	6.2
5. Sugar, Cement, Cement Products	2	3.1
6. Others	7	10.8
[II] Non-Manufacturing	8	12.3
1. Hotels & Restaurants	5	7.7
2. Consulting & Construction	3	4.7
Total	65	100.0

Source: K. Balakrishnan (1976)

Within manufacturing, the number of projects in oil refining and chemical industries rose rapidly, there was a slight increase in the engineering industry and a slight decrease in textiles. In the non-manufacturing sector, the number of projects in the construction and consulting industries rose dramatically.

6) As for total investment amount, 94.8% was in the manufacturing industry, much more than Taiwan's 84.0%, and another clear indication that India has a manufacturing-centered type of direct investment.

The largest recipient in the manufacturing sector remains textiles with 30.7% of total investments. The ratio for engineering is also large (20.1%), whereas the share for the chemical industry is only 6.0%.

7) India's average investment per project is very small scale compared to S. Korea and Taiwan. The discrepancy is much greater in the non-manufacturing

sector than in manufacturing. The only exception is textiles where India's average amount is $933,200, larger than Taiwan's $554,000.

However, the average investment in textiles is three or four times larger than those in the "heavy-chemical industry", i.e., the engineering and chemical industries. This difference indicates the characters of engineering and chemical projects India has invested in. Very few of the products they make require high-level technology and almost no large-scale investment was required. One cannot conclude from the large number of investment projects in the "heavy-chemical" industry and the increase in these projects that Indian investments have reached a fairly high standard of technology.

By region, India's average investment per project is highest in Africa at $840,400, with Southeast Asia next at $577,600. In the other three regions the averages are considerably less. The average amount in these two regions is relatively high because investment is concentrated in the manufacturing sector; it is very small-scale in other regions because it is mainly in the service sector.

V. Rates and Forms of Equity Participation by Indian, S. Korean and Taiwanese Overseas Firms

India

Table 6 shows Indian equity participation in 117 operating projects as of August 31, 1980. In 97 cases, or 82.9%, Indians have minor equity participation of less than 50%. They have major equity participation of more than 50% in only 20 projects, or 17.1%. In 52 cases, or 44.5%, there is an Indian equity ratio of 31–50%.

As for investment amount, Rs. 277.1 million or 77.6% of the total, is in minor equity participation projects. The investment amounts are almost the same for equity ranges of 21–30%, 31–40%, 41–50% and more than 50%; each of these percentage ranges has about 20% of the total.

Table 6. Indian Foreign Direct Investment – Distribution by the Extent of Indian Equity, as of August 31, 1980

Percentage Range	Number of Projects				Indian Equity (Rs. million)				Average Equity Participation
	Number	Percent to Total %	Cumulative Number	Percent to Total %	Equity	Percent to Total %	Cumulative Number	Percent to Total %	
0 ~ 10	9	(7.7)	9	(7.7)	4.5	(1.3)	4.5	(1.3)	0.5
11 ~ 20	17	(14.5)	26	(22.2)	37.9	(10.6)	42.4	(11.9)	2.2
21 ~ 30	19	(16.2)	45	(38.5)	71.7	(20.1)	114.1	(32.0)	3.8
31 ~ 40	25	(21.4)	70	(59.8)	89.4	(25.1)	203.5	(57.0)	3.6
41 ~ 50	27	(23.1)	97	(82.9)	73.6	(20.6)	277.1	(77.6)	2.7
51% & above	20	(17.1)	117	(100.0)	80.0	(22.4)	357.1	(100.0)	4.0
Total	117	(100.0)			357.1	(100.0)			3.1

Source: S. Kumar (1981)

The average investment per project is Rs. 3.1 million. The average investment in a project with Indian equity participation of more han 51% is Rs. 4 million; at the 21–30% equity range the average is Rs. 3.8 million, and at 31–40% it is Rs. 3.6 million. By contrast, at the 0–10% range, it is a mere Rs. 0.5 million.

Generally, it can be assumed that where the Indian equity share is low, the amount invested is also small. Yet while this assumption works for equity ranges of 0–10%, 11–20% and more than 50%, it does not apply in some cases in the 21–50% range. Also, the estimated average project scale as calculated from Table 6 is: 0–10% – Rs. 10 million; 11–20% – Rs. 14.7 million; 21–30% – Rs. 15.2 million; 31–40% – Rs. 10.3 million; and for 41–50% – Rs. 6 million. These estimated averages show that when the Indian equity rate is from 11–30%, the project scale is relatively large. Yet when the Indian equity rate is from 0–10% and more than 31%, the project scale is relatively small. In particular, when Indian equity is more than 41%, the project is very small.

Table 7 shows the equity base of 117 Indian joint ventures. The total equity capital of the 117 projects is Rs. 1,205.9 million. According to Table 6, total Indian equity capital is Rs. 357.1 million. Thus the average Indian equity participation rate is 29.7% and the average equity capital scale is Rs. 10.3 million.

Table 7. Equity Base of Indian Joint Ventures, as of August 31, 1980

Equity Range (Rs. million)	Number of Joint Ventures	(%)	Equity Capital (Rs. million)	(%)
0 – 1	35	(29.9)	13.8	(1.1)
1 – 2	20	(17.1)	28.7	(2.4)
2 – 3	9	(7.7)	19.0	(1.6)
3 – 4	3	(2.6)	11.0	(0.9)
4 – 5	5	(4.3)	23.2	(1.9)
5 – 10	15	(12.8)	106.3	(8.8)
10 – 15	4	(3.4)	47.1	(3.9)
15 – 20	7	(6.0)	115.2	(9.6)
20 & above	19	(16.2)	841.6	(69.8)
Total	117	(100.0)	1,205.9	(100.0)

Source: S. Kumar (1981)

The largest number of enterprises, 35, are in the equity capital range of less than Rs. 1 million. There are 20 companies in the range of Rs. 1 – 2 million. These two categories constitute 47% of all joint ventures. These data show even more clearly that most of the enterprises that Indians seek a joint venture with are very small scale. Of the 64 joint ventures with less than Rs. 3 million of equity capital, 28 are in manufacturing.

Table 8 shows the pattern of Indian investment in joint ventures. It is noteworthy that of the total Indian equity in projects in operation of Rs. 357.1 million, Rs. 209.4 million, or 58.6%, is equity in kind through the export of capital equipment. By contrast, equity in cash is only Rs. 37.2 million, or 10.4%. With projects under implementation, the equity in kind ratio is even higher – 74.6% – and the

equity in cash is only 3.6%. These data show that Indian joint ventures not only are very far from being the "spread of multinational firms" but, precisely speaking, they are not "direct investment." Frankly, this is not the export of capital; it is commodity export disguised as capital export to a joint venture. Rather than India's "direct investment" being an export substitution, it is a different form of exports. This is a pronounced feature of Indian joint ventures.

Table 8. Pattern of Indian Investment in Joint Ventures as of August 31, 1981

(Equity in Rs. million)

Mode of Participation	In Operation		Under Implementation	
	Indian Equity (actual)	Percent to Total (%)	Indian Equity (as approved)	Percent to Total (%)
1. Export of capital equipment	209.4	58.6	424.9	74.6
2. Capitalisation of know-how	29.2	8.2	69.8	12.3
3. Cash remittance	37.2	10.4	20.7	3.6
4. Bonus shares issued	72.5	20.3	–	–
5. Others (loans, adjustment of future profits, preliminary expenses capitalised etc.)	8.8	2.5	54.0	9.5
Total	357.1	100.0	569.4	100.0

Source: S. Kumar (1981)

S. Korea

S. Korean FDI contrasts markedly with the Indian case.

Table 9 shows the ownership pattern of overseas S. Korean firms by equity ratio and industry. Of 243 cases, 66.3%, or 161 firms, are wholly owned subsidiaries. In 217 cases, or 89.3%, including these subsidiaries, S. Korea has equity participation of more than 50%. By industry, in trading and real estate most firms are wholly owned. There are 149 cases of investment in the trade sector, which constitutes 61.3% of all cases; 134 trading firms are wholly owned, which constitutes 83.2% of all the wholly owned firms. This equity pattern is the reason why S. Korea's FDI is a predominantly "wholly owned subsidiary type".

Of 32 firms in resource-extractive industries like mining, timbering and fishing, three (9.4%) are wholly owned, 16 (50%) are more than 50% owned, 13 (40.6%) are less than 50% owned.

Of 19 firms in manufacturing, two (11%) are wholly owned, 11 (58%) are more than 50% owned, and six (32%) are less than 50% owned. From the manufacturing industry alone, S. Korea has a much higher ratio of major equity participation projects than India. This phenomenon illustrates the sharp differences between the two countries' FDI strategy and direction.

Table 9. Ownership Pattern of Overseas South Korean Firms, 1978

Industry	100%	More than 50%	Less than 50%	Sub-total
1. Mining	1 (50)	– (–)	1 (50)	2 (100)
2. Timbering	1 (14)	6 (86)	– (–)	7 (100)
3. Fishing	1 (4)	10 (43)	12 (52)	23 (100)
4. Manufacturing	2 (11)	11 (58)	6 (32)	19 (100)
5. Construction	5 (31)	9 (56)	2 (13)	16 (100)
6. Transport & warehousing	4 (57)	2 (29)	1 (14)	7 (100)
7. Trading	134 (90)	12 (8)	3 (2)	149 (100)
8. Others	5 (42)	6 (50)	1 (8)	12 (100)
9. Real estate	8 (100)	– (–)	– (–)	8 (100)
Sub-total	161 (66.3)	56 (23.0)	26 (10.7)	243 (100.0)

Note: figures in parenthesis represent the percentage share to total of each industry
Source: Jo (1981) p. 67

S. Korea's ultimate objective is the same as India's: export promotion. However, in India's case, direct investment is a variation of exports and the goal is to sell the commodities produced by the joint venture in the domestic market of the LDCs where the venture is established. By contrast, S. Korea's direct investment is "true" capital export and the goal is to secure and expand markets in developed countries.

Table 10, which shows the sources of funding for S. Korea's equity investments, also illustrates a difference with India's investment pattern. An overwhelming share – 70.4% – of S. Korea's funding is equity in cash. Moreover, 16.8% was raised locally as standby credit guaranteed by S. Korean banks, and 10.0% was raised by loans; only 2.6% was in-kind equity.

A comparison of India and S. Korea's equity ratio (or ownership pattern) and sources of funding for investment shows that the former likes minor equity participation in joint ventures and prefers in-kind equity while the latter likes wholly owned subsidiaries and prefers cash equity participation. The two patterns are nearly polar opposites.

Taiwan

Judged by equity rates and forms of investment, Taiwan falls between S. Korea and India.

Table 11 shows Taiwan's FDI by ownership and regional distribution. Of 136 cases, 21 (15%) are wholly owned; there is major equity participation in 15 (11%); 14 (10%) have equal participation. In summary, 36% of the firms have more than 50% equity participation. On the other hand, there is minor equity participation in 58 cases, or 43%. (However, data for the remaining 21 firms are incomplete).

By location, 27% of firms in the LDCs have more than 50% equity participation (11% of all wholly owned companies) and 50% of the projects are minor equity participation. In the developed countries, 91% of the projects have more than 50% equity participation (41% of all wholly owned firms) and only 5% of the projects have less than 50% equity participation. The ownership pattern differs greatly

Table 10. S. Korea's Sources of Funding for Equity Investments, 1978

(U.S. Dollars)

Industry	Cash	In Kind	Standby Credit	Loans	Profits	Total	Repatriation	Balance
Mining	386,000	–	–	–	–	386,000	–	386,000
Timbering	6,149,851	–	3,099,561	4,400,000	–	13,649,413	–	13,649,413
Fishing	4,264,651	327,000	561,985	–	–	5,159,636	65,900	5,093,736
Manufacturing	12,136,622	100,239	1,300,000	–	–	13,536,862	–	13,536,862
Construction	4,908,102	1,571,871	2,588,575	–	150,000	9,218,555	–	9,218,555
Transportation and warehousing	184,000	–	800,000	–	–	984,000	–	984,000
Trading	12,354,091	29,410	–	–	–	12,383,502	–	12,383,502
Others	12,290,481	–	–	3,696,650	29,400	16,016,531	–	16,016,531
Real estate	4,104,373	40,423	5,194,800	–	–	9,339,597	–	9,339,597
Subtotal	56,778,175	2,068,951	13,550,921	8,096,650	179,400	80,674,097	65,900	80,608,197
(%)	(70.4)	(2.6)	(16.8)	(10.0)	(0.2)	(100.0)		

Sources: Jo (1981), p. 69.

Table 11. Taiwan's Foreign Direct Investment by Ownership and Region

Country/Region \ Ownership	100%	More than 51%	50%	Less than 50%	Uncertain	Total
Thailand		2 (9)		15 (65)	6 (26)	23 (100)
Malaysia				11 (61)	7 (39)	18 (100)
Singapore	2 (13)	3 (19)	1 (6)	8 (50)	2 (13)	16 (100)
Philippines	1 (12)			7 (88)		8 (100)
Indonesia		1 (11)	2 (22)	4 (44)	2 (22)	9 (100)
Other LDCs	9 (22)	6 (15)	3 (8)	12 (30)	10 (25)	40 (100)
Subtotal of LDCs	12 (11)	12 (11)	6 (5)	57 (50)	27 (24)	114 (100)
United States	6 (43)	3 (21)	3 (21)	1 (8)	1 (7)	14 (100)
Other DCs	3 (37)		5 (63)			8 (100)
Subtotal of DCs	9 (41)	3 (14)	8 (36)	1 (5)	1 (5)	22 (100)
Total	21 (15)	15 (11)	14 (10)	58 (43)	28 (21)	136 (100)

Note: Figure in parentheses is percentage.
Source: Lim (1981).

in developed countries and less-developed countries; government policy in the recipient country is a decisive factor.

With S. Korea, also, a great many of the wholly owned firms are in trade, a majority are in developed countries – the United States and Europe. This industrial and regional pattern has made wholly owned subsidiaries prominent in S. Korea's FDI. India's enterprises, by comparison, are in less-developed countries in Southeast Asia and Africa, a pattern which accounts for the dominant position of minor equity participation. The higher the ratio of investment projects in LDCs, the higher the percentage of minor equity participation. By the same token, the higher the ratio of projects in the developed countries, the higher the percentage of major equity participation.

Data on forms of investment in Taiwanese enterprises are provided by Ting and Schieve (1981) and Enatsu (1982). According to Enatsu, of 124 accumulated investment numbers by the end of 1978, 70 (56%) were in kind and entailed no capital transfer, while 44 (35%) had capital transfer, which was 31.3% of total investment ($15,660,000). There were also 10 (8%) of combined capital and in-kind investment. According to Ting and Schieve, of the accumulated investment by the end of 1979, 64.89% of the equity participation was by foreign currency, 25.72% was by machinery, 8.15% was by materials and 1.24% was by technical knowhow. When investments in trading are excluded, equity participation by the export of machinery was 31.4% of the total investment amount. Thus, judged by forms of investment, Taiwan FDI lies between S. Korea and India.

VI. Conclusions

In Lecraw's (1977) pioneering work on FDI from LDCs, the author compared their major characteristics with the MNCs from the developed countries. Lecraw made the following observations. The major motive of multinational corporations from the developed countries is to protect existing markets and to exploit technological advantages, and so Vernon's hypothesis of product life cycle is applicable. The LDCs' MNCs also have a market-defense motive, but other important motives such as their small home markets, risk diversification, etc. The MNCs in the developed countries are monopolistic big firms that can plan an investment strategy around their powerful position. They have large-scale, sophisiticated high technology, they use product quality (or differentiation) and brand image as competitive weapons, and they have a comparative advantage in specialized marketing know-how. They also dislike joint ventures with host-country firms and prefer wholly controlled subsidiaries.

Regarding the overseas corporations from LDCs, Lecraw said they use labor-intensive technology suitable for small-scale production, they produce standardized products at a low profit margin, and they use low costs as a competitive weapon. Most cases are minority equity participation and they prefer joint ventures with host country firms. These companies do not remit much profit to the home country but instead use it to build an investment base in the recipient country. These firms increase local participation, have a high degree of independence from the parent company, respect local autonomy and for that reason, their management costs are low. There are strong family or ethnic ties with the local partner in the joint venture.

Lecraw's conclusions were based on a survey of 200 companies in Thailand. These included 20 enterprises from LDCs: India – nine, Taiwan – six, Singapore – two and Malaysia – three. Even though the survey involved relatively few companies, Lecraw's hypothesis may be considered generally correct for India and Taiwan's FDI.[5] However, S. Korea's case does not seem to fit into Lecraw's framework. As shown above, many S. Korean corporations prefer to establish wholly owned subsidiaries and there are rarely family or ethnic ties in the host country.

In this respect, Lall's (1982) assertion that each LDC's pattern of FDI should be analysed from revealed comparative advantage hypothesis is extremely interesting. He divides LDCs' "MNCs" into two kinds. The first are "MNCs" from small open economies like Hong Kong without indigenous capital goods industries. These corporations are engaged in light consumer goods industries that have virtually no "embodied" technology of their own. They exploit management and marketing expertise and a mastery of production know-how.

The second kind of "MNCs" is a Latin American variety. It has a more varied range of ventures abroad, is relatively weak in sophisticated consumer goods, but relatively strong in the complex mechanical engineering sector. All these countries have large economies, long histories of import substitution and fairly developed heavy industry.

According to Lall, India belongs to the second type but it has pursued a different technological strategy. The Latin American countries have, in the past, adopted a policy of passive reliance on foreign technology, but India has followed

a strategy of greater technological self-reliance. While India's approach has resulted in various insufficiencies and technological lags, it has also enabled India's national enterprises to build up a very broad base of technological experience. Rather than just acquire simple "know-how," India's enterprises have obtained "know-why" (basic design capabilities).

As this example suggests, Lall's models are lucidly stated. He explains the differences in the FDI of LDCs by the size of the national economy and economic development strategy (export promotion model vs. import substitution model), particularly technology devleopment strategy.

However, lucidity in models is always purchased at the cost of oversimplification. Taiwan probably fits into Lall's first category, but this cannot explain its recent FDI in the chemical industry in the United States. Regarding S. Korea, if Lall's theory is limited to investment in manufacturing, it probably is valid. But his hypothesis does not begin to explain the overall aspects of S. Korean FDI. Finally, Lall praises India highly for its technology strategy, but as our survey suggested, the average investment per project of FDI in "heavy industry," as represented by the engineering industry, was even less than for the light consumer goods industries. The technological level is still very low. Thus, many aspects of Lall's hypothetical models surely require modification. My impression is that the technological factor has been overvalued and insufficient weight given to ownership.

As our survey has shown, differences in economic development strategy are reflected in FDI patterns. S. Korea and Taiwan pursue a policy of export promotion and their important investment regions are the United States and Southeast Asia. And S. Korea has a high ratio of investment in the trade sector. By contrast, India has adopted an import subsitution strategy, its major investment regions are Southeast Asia and Africa, and its investments are overwhelmingly in manufacturing.

Yet differences in development strategy alone cannot explain the disparities between S. Korea and Taiwan. We want to add restrictions on international payments (or the system of restraints on foreign currency) and the presence/absence of family and ethnic ties as explanatory factors. The restrictions imposed by foreign exchange produce differences in the forms of FDI and equity participation rates.

Because the restrictions on India's reserves are very great, direct investment must be in the form of joint ventures and Indian enterprises prefer in-kind investment to cash. Capital export from a capital-scarce country is a contradiction, but India's "FDI" has resolved this contradiction. Here "export of capital" is actually the "export of commodities." The reason why the export of commodities must be disguised as export of capital is that the rising tide of import substitution strategies by the host LDC governments compelled a different format. Under such severe balance of payments pressure, FDI through a small-scale joint venture with minor equity participation is compatible with the quest for export profits and the active particiaption of a local partner was an essential element. Accordngly, as the restrictions on balance of payments ease, it can be expected that the equity rate will rise and participation in cash will also increase. From this perspective, the differences in India, Taiwan and S. Korea's forms of FDI can be regarded as partially a result of variations in their level of economic development.

The last factor I want to call attention to is whether there are family or ethnic

ties. With India and Taiwan, these links abroad (overseas Indians/Chinese) play a critical role in their FDI. The overseas communities are especially useful in providing business information and marketing assistance.

This is an advantage to India and Taiwan's FDI, but it is also a huge impediment. While India and Taiwan's FDI began earlier than S. Korea's, Seoul's growth rate has been much more rapid. This discrepancy partially reflects whether there were family or ethnic ties or not. Because S. Korea lacks such connections overseas, enterprises had to establish their own marketing organization. This was the origin of the S. Korean general trading company which has proved a success.[6] The differences between the FDI of India and Taiwan and that of S. Korea can be partly explained by who is responsible for marketing.

Notes

1. For S. Korea and Taiwan, the number of outstanding projects is the number of approvals minus the number of withdrawals; for India, the number of effective projects, i.e., the projects in operation plus those under implementation was used.
2. Ting and Schieve (1981); Enatsu (1982).
3. Jo (1981) notes another category of investment in research and development firms in an industrialized nation.
4. Wells (1983), pp. 78–89. However, he points out that the investment in Nigeria cannot be explained by "ethnic ties."
5. However, Lall has written that the characteristics of FDI by LDCs that Lecraw described were based on observation of the early Third World MNCs (which were set up around 1970) and that "new breed" of investors is emerging with different characteristics (See Lall (1983) p. 12, f.n. 1).
6. The FDI pattern that results when a general trading company does the marketing resembles more than anything else the cachet of Japan's FDI.

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Appendix 1: INDIAN JOINT VENTURES IN OPERATION (As of 1-4-1982)

S. No.	Country of location Name of Indian promoter	Field of collaboration	Indian equity Rs. 000
1	2	3	4
AUSTRALIA (1)			
1	Oberoi Hotels (India) P. Ltd.	Operate hotels	685
BAHARAIN (1)			
2	Alcon Constructions	Construction jobs	110
BANGLADESH (1)			
3	Mohan Holdings P. Ltd.	High fashion garments	400
BOTSWANA (1)			
4	General Corrugating Industries	Packaging material	500
FIJI (1)			
5	Asian Paints (India) Ltd.	Paints, enamels etc.	1122
FRANCE (1)			
6	Spencer and Co. Ltd.	Restaurant	262
HONG KONG (2)			
7	Development Consultants (P) Ltd.	Engineering consultancy	258
8	Mehra Jewellers	Jewellery and general trading	28
INDONESIA (12)			
9	The Raymond Woolen Mills Ltd.	Engineering steel files	1063
10	The Century Spg. & Mfg. Co., Ltd.	Textile yarn	3850
11	Bahrat Commerce and Industries Ltd.	Textile yarn	6911
12	Shabibag Entrepreneurs P. Ltd.	Polyester blended yarn	14142
13	Ballarpur Industries Ltd.	Coated art paper	20016
14	ASC Engineers and Allied Industries Ltd.	Wire rods, tor, steel, round bars etc.	9320
15	Kusum Products Ltd.	Solvent extraction, margarine etc.	7710
16	Sarabhai M. Chemicals	Pharmaceuticals	4727
17	Godrej and Boyce Mfg. Co. Pvt. Ltd.	Steel furniture etc.	4840
18	Gokak Patel Volkart Ltd.	Textile mill	20500
19	Amar Dye-Chem Ltd.	Dye stuff	1504
20	Bombay Dyeing and Mfg. Co. Ltd.	Textile mill	14794
KENYA(10)			
21	R.M. Goculdas	Textile mill	4415
22	The Raymond Woolen Mills Ltd.	Woolen textiles	28350
23	Kulindi Investments (P) Ltd.	Pharmaceuticals	693
24	Orient Paper Mills Ltd.	Paper	58301
25	Salvi Pvt. Ltd.	Cast iron foundry	42
26	J.K. Synthetics Ltd.	Synthetic filament yarn	21684
27	Bolton India	Auto ancillaries	552
28	LIC and GIC of India	Life and general insurance	6410
29	Kirloskar Brothers Ltd.	Marketing	889
30	Gangappa Cables Ltd.	Copper and aluminium wire	300
KUWAIT (1)			
31	Biecco Lawrie Ltd.	Electrical repair shop	147
MALAYSIA (28)			
32	Godrej & Boyce Mfg. Co. Pvt. Ltd.	Steel furniture	2889
33	Ajit Wire Industries P. Ltd.	Enamelled copper and aluminum wires	590
34	Kirloskar Electric Co. Ltd.	Electric motors, pumps & diesel engines	3590
35	Murugappa & Sons	Cycle & industrial chains	98
36	Birla Cotton Spg. & Wvg. Mills Ltd.	Synthetic and blended fabrics	8330
37	L.G. Balakrishnan & Bros. Ltd.	Chains for bicycles etc.	440
38	Berar Oil Industries	Fractionation of palm oil	3880
39	J.G. Glass Industries Ltd.	Glass containers	5640
40	Chemical Construction Co. P. Ltd.	Palm oil fractionation	1266
41	Tata Oil Mills Co. Ltd.	Neutralised oil, palm olein etc.	48136
42	Bombay Auto Ancillary and Investment P. Ltd.	Tube valves	735
43	Hindustan Safety Glass Works Ltd.	Automobile glass	372
44	Indian Pistons Ltd.	Pistons and cylinder liners	1899
45	Excel Process P. Ltd.	Anodised aluminium products	650
46	Auto Electric Enterprises P. Lt.d	Automobile and electronic parts	109

S. No.	Country of location Name of Indian promoter	Field of collaboration	Indian equity Rs. 000
1	2	3	4
47	Zaverchand Gaekward P. Ltd.	Metal flexible tubes	385
48	Godrej Soaps Ltd.	Palm oil refining & fractionation	5040
49	Ballarpur Industries Ltd.	Palm oil refining	8880
50	Kwality Textile Associates Pvt. Ltd.	Cotton and blended yarn	2332
51	Sarabhai M. Chemicals	Phormaceutical products	2870
52	TELCO Ltd.	Assembly of commercial vehicles	5435
53	Polyolefins Industries Ltd.	HD polyethylene pipes and fittings	583
54	Universal Radiator Ltd.	Radiators, heat-exchangers etc.	1678
55	The Century Spg. & Wvg. Co. Ltd.	Palm oil refining	3863
56	The Liberty Chemical Works Overseas P. Ltd.	Photographic & fine chemicals	420
57	Birla Eastern Ltd.	Palm oil processing	4123
58	Gajra Gears P. Ltd.	Automobile gears etc.	11396
59	Kirloskar Electric Co. Ltd.	Trading & marketing	149
MAURITIUS (5)			
60	The Raymond Woolen Mills Ltd.	Readymade garments (Woolen)	1319
61	Infin Consultants P. Ltd.	Steel rolling mill	820
62	Srikant Ruparel	Processing of textiles	173
63	Exportos India	Readymade garments	933
64	Kirloskar Bros. Ltd.	Power driven pumps	264
NEPAL (1)			
65	Oberoi Hotels (India) P. Ltd.	Hotel	1462
NETHERLANDS (1)			
66	Speciality Fats P. Ltd.	Cocoa butter substitutes	375
NIGERIA (6)			
67	Birla Bros P. Ltd.	Light engg. goods	9010
68	– do –	Consultancy	78
69	Best and Crompton Engg. Ltd.	Contracts for transmission lines	1120
70	Ranbaxy Laboratories Ltd.	Drugs & pharmaceuticals	840
71	Karam Chand Thapar & Bros Ltd.	Waste cotton blankets	2065
72	Hyderabad Asbestos Cement Products Ltd.	Asbestos cement products	13068
OMAN (1)			
73	Tata Exports Ltd.	Trading company	798
PHILIPPINES (2)			
74	Kirloskar Oil Engines Ltd.	Diesel engines	1200
75	Eastern Spg. Mills Ltd.	Yarn	3298
SAUDI ARABIA (3)			
76	Deccan Enterprises P. Ltd.	Rubber rings & products	948
77	Oberoi Hotels (India) P. Ltd.	Management	600
78	Western India Erectors Ltd.	Engineering projects	2400
SINGAPORE (14)			
79	Teksons Ltd.	Auto ancillaries	2075
80	Indo-Berolina Industries P. Ltd.	Consultancy service	14
81	TELCO Ltd.	High precision toolings	6388
82	Southern Industrial Corpn. Ltd.	Enamelled wire	650
83	Parle (Exports) Pvt. Ltd.	Concentrates for soft drinks	150
84	J. Thomas & Co. Pvt. Ltd.	Tea auction centre	1800
85	First Leasing Co. of India Ltd.	Leasing operations	635
86	Chemical Construction Co. (P) Ltd.	Palm kernel processing	712
87	Garware Plastics and Polyester Ltd.	Trading & marketing	19
88	Amritlal Chemaux Ltd.	Trading & marketing	46
89	Godrej & Boyce Mfg. Co. P. Ltd.	Steel furniture etc.	939
90	Essar Bulk Carriers Ltd.	Shipping	800
91	Larsten & Toubro Ltd.	Bottle closures	11200
92	Hindustan Computers Ltd.	Computers	1400
SRI LANKA (7)			
93	Colour Chem. Ltd.	Pigment emulsions	1173
94	Jay Engg. Works Ltd.	Sewing machines and fans	490
95	Ponds (India) Ltd.	Toiletries & cosmetics	377

S. No.	Country of location Name of Indian promoter	Field of collaboration	Indian equity Rs. 000
1	2	3	4
96	Bhor Industries Ltd.	PVC leather cloth	354
97	Swastik Glass Works	Glass & glassware	49
98	Shanti Vihar Hotels P. Ltd.	Vegetarian restaurant	111
99	Sita World Travel P. Ltd.	Promoting travel & tourism	57
THAILAND (5)			
100	Birla Bros. P. Ltd.	Synthetics & cotton yarn	750
101	Bacha Eporters and Investors P. Ltd.	Steel rolling mill	3060
102	The Gwalior Rayon Silk Mfg. (Wvg) Co. Ltd.	Viscose staple fibre	4792
103	Hada Steel Products Ltd.	Hacksaw blades	1059
104	The Gwalior Rayon Silk Mfg. (Wvg) Co. Ltd.	Carbon black	5706
UGANDA (1)			
105	Birla Jute Mfg. Co. Ltd.	Jute goods	2807
U.A.E. (9)			
106	Ajit India Pvt. Ltd.	Aluminium architectural products	405
107	R.M. Goculdas	Cylinders and tanks	800
108	Phoenix Distributors Pvt. Ltd.	Sulphuric acid	100
109	Gammon India Ltd.	Engineering contracts	2501
110	Ballarpur Industries Ltd.	Construction & trading	540
111	S.V. Shah Construction Services P. Ltd.	Construction work	440
112	Pure Ice Cream Co. (1967) P. Ltd.	Ice cream	500
113	Shree Ramanand Sagar	Marketing of films	
114	BDA Investments and Consultants P. Ltd.	Steel rolling mill	
U.K. (9)			
115	Ghai Lamba Catering Consultants P. Ltd.	Indian style restaurant	60
116	Park Hotel	Indian style restaurant	9
117	Ghai Lamba Catering Consultants P. Ltd.	Holding co. to promote restaurants	1
118	– do –	Restaurant	32
119	Clarostat (India) Ltd.	Marketing of electronic products	150
120	Kirloskar Bros. Ltd.	Trading & marketing of pumps	852
121	Orient Longmans Ltd.	Book publishing & distribution	90
122	Karna Hotels P. Ltd.	Vegetarian restaurant	200
123	Deccan Mech. & Chem. Industries P. Ltd.	Erection services	135
USA (9)			
124	Ghai Lamba Catering Consultants P. Ltd.	Indian style restaurant (Chicago)	38
125	– do –	Indian style restaurant (New York)	43
126	Mohan Exports (India) P. Ltd.	Wholesale distribution of apparel	200
127	Krishna Hotels P. Ltd.	Indian style restaurant	130
128	Sun-N-Sand Hotels P. Ltd.	Indian style restaurant	170
129	Auto and General Engg. Co.	Assembly and marketing of agricultural implements	700
130	Kirloskar Bros. Ltd.	Marketing of pumps	1202
131	Vulcan Engineers	Process ovens etc.	20
132	Bajaj Auto Ltd.	Marketing of vehicles	124
W. GERMANY (2)			
133	Kirloskar Oil Engines Ltd.	Assembly of diesel engines	3800
134	Sigma Rubber P. Ltd.	Marketing of automobile & industrial rubber products	240

Note: Indian equity represents the paid-up portion of the Indian share capital in the Joint Venture. As the equity share capital of the Joint Venture set up abroad is expressed in terms of the local currency, the Rupee equivalents given in the statement are approximations.

Source: *The Economic Times*, July 30, 1983

Appendix 2. South Korean FDI by Year and Region

(Unit: $1,000)

Year	Region	South East Asia	Middle East	North America	Latin America	Europe	Africa	Oceania	Total Investment (A)	Clearance: Investment (B_1)	Clearance: Withdrawal (B_2)	Balance: Investment Balance ($A-B_1$)	Balance: Net Investment ($A-B_2$)
1970(1)	Number	9		1				1	11			11	
	Amount	7,396		1				56	7,453			7,453	7,453
1971	Number	2		5		1			8			8	
	Amount	3,065		2,486		1,310			6,861	950	950	5,911	5,911
1972	Number	9		2	2				13			13	
	Amount	4,408		106	601				5,115	348	348	4,767	4,767
1973	Number	4		5	1		1		11	1		10	
	Amount	1,913		1,642	342		10		3,907	190		3,717	3,907
1974	Number	10	2	2	2	2		1	19	2		17	
	Amount	22,176	387	38	90	403		55	23,149	104	104	23,045	23,045
1975	Number	11	1	2		4	2		20	9		11	
	Amount	8,273	49	363		434	52		9,171	4,470	4,082	4,701	5,089
1976	Number	6	2	22	2	8	4	2	46	16		30	
	Amount	1,127	343	1,272	333	568	4,522	55	8,220	1,277	1,102	6,943	7,118
1977	Number	9	2	20	4	15	2	1	53	7		46	
	Amount	1,643	591	4,420	264	975	8,214	1,688	17,795	5,464	3,332	12,331	14,463
1978	Number	20	6	38	6	11	5		86	12		74	
	Amount	14,345	5,815	12,127	601	899	9,631		43,418	4,657	4,361	38,761	39,057
1979	Number	16	10	9	4	7	5	1	52	3		49	
	Amount	4,982	3,633	7,535	3,333	658	2,510	121	22,772	3,952	3,887	18,820	18,885
1980	Number	13	8	13		6	2	2	44	26		18	
	Amount	1,588	11,058	4,387	2,191	659	1,160	46	21,095	5,639	4,071	15,456	17,024
1981	Number	17	3	14	3		4	4	45	11		34	
	Amount	9,897	1,592	5,579	10,395	1,109	656	10,849	40,077	8,380	7,907	31,697	32,168
1982	Number	10	7	16	5	6	1	5	50	19		31	
	Amount	8,674	7,923	47,118	21,657	2,352	325	41,326	129,375	13,413	5,091	115,962	124,284
Total	Number	136	41	149	29	60	26	17	458	106		352	
	(%)	(29.7)	(9.0)	(32.5)	(6.3)	(13.1)	(5.7)	(3.7)	(100.0)				
	Amount	89,487	31,391	87,074	39,807	9,367	27,086	54,196	338,408	48,844	35,237	289,564	303,171
	(%)	(26.4)	(9.3)	(25.7)	(11.8)	(2.8)	(8.0)	(16.0)	(100.0)				

(1) Figures for 1970 are the cumulative total to that year

Source: National Economic Federation, *R.O.K. Economic Yearbook, 1982, R.O.K. Economic Yearbook 1983*

Appendix 3. South Korean FDI by Year and Industry

(Unit: $1,000)

Year	Industry	Mining	Timbering	Fishing	Manufacturing	Construction	Transportation	Trading	Others	Real Estate	Total Investment (A)	Clearance: Investment (B_1)	Clearance: Withdrawal (B_2)	Balance: Investment Balance ($A-B_1$)	Balance: Net Investment ($A-B_2$)
1970	Number		2			2		2	3	2	11			11	
	Amount		4,150			411		244	467	2,181	7,453			7,453	7,453
1971	Number			1	1	1		1	3	1	8			8	
	Amount		2,965	84	140	1,189		421	696	1,366	6,861	950	950	5,911	5,911
1972	Number			2	1	5		2	2	1	13			13	
	Amount		1,468	539	62	1,566		345	391	744	5,115	348	348	4,767	4,767
1973	Number		2	2	3	2		2			11	1		10	
	Amount		735	342	24	994		670	33	1,109	3,907	190		3,717	3,907
1974	Number				6	1	1	9	2		19	2		17	
	Amount		3,058		11,723	616	2	1,637	6,080	33	23,149	104	104	23,045	23,045
1975	Number		1	3	1	3		12			20	9		11	
	Amount		3,976	237	2,039	1,346		750	542	281	9,171	4,470	4,082	4,701	5,089
1976	Number			6	2	1	1	31	3	2	46	16		30	
	Amount		26	105	1,562	172	206	4,076	1,825	248	8,220	1,277	1,102	6,943	7,118
1977	Number		2	4			3	44			53	7		46	
	Amount		2,414	5,027			698	8,156	1,500		17,795	5,464	3,332	12,331	14,463
1978	Number	2	1	5	4	9	2	59	2	2	86	12		74	
	Amount	386	4,448	1,363	8,203	11,067	330	7,889	2,574	7,158	43,418	4,657	4,361	38,761	39,057
1979	Number	1		8	6	4	4	22	5	2	52	3		49	
	Amount	1,034	3,263	2,616	4,117	2,679	945	2,826	1,971	3,321	22,772	3,952	3,887	18,820	18,885
1980	Number			2	8	7	3	22	2		44	26		18	
	Amount	1,791		149	5,349	7,839	365	4,714	136	752	21,095	5,639	4,071	15,456	17,024
1981	Number	2	1	4	7	5	2	22		2	45	11		34	
	Amount	10,039	11,053	187	4,202	3,142	237	6,670	15	4,532	40,077	8,380	7,909	31,697	32,168
1982	Number	4	1	1	3	8	3	19	11		50	19		31	
	Amount	89,757	9,499	4,360	1,125	9,701	211	8,103	6,619		129,375	13,413	5,091	115,962	124,284
Total (%)	Number	9	10	38	42	48	19	247	33	12	458	106		352	
	(%)	(2.0)	(2.2)	(8.3)	(9.2)	(10.5)	(4.1)	(53.9)	(7.2)	(2.6)	(100.0)				
	Amount	103,007	47,055	15,009	38,546	40,722	2,994	46,501	22,849	21,725	338,408	48,844	35,237	289,564	303,171
	(%)	(30.4)	(13.9)	(4.4)	(11.4)	(12.0)	(0.9)	(13.7)	(6.8)	(6.4)	(100.0)				

Source: National Economic Federation, *R.O.K. Economic Yearbook 1982, R.O.K. Economic Yearbook 1983.*

Appendix 4. Taiwan's FDI by Year and Region

(Unit: $1,000)

Year	Thailand		Malaysia		Singapore		Philippines		Indonesia		(ASEAN Total)		U.S.A.		Others		Total	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
1959												100					1	100
1960																		
1961																		
1962	1	492									1	492					1	492
1963	1	86									1	86			2	1,342	3	1,428
1964			3	161	2	640					5	801			1	220	6	1,021
1965	2	400	4	373	1	198					7	971					7	971
1966					1	118	1	250			2	368				350(1)	2	718
1967	4	563	3	176							7	739				228	7	967
1968	2	578	2	114							4	692			1	1,077	5	1,769
1969													1	100	1	22	2	122
1970	1	100		24		210					1	334			4	193	5	527
1971	4	844	2	139			1	60	1	35	8	1,078	1	100	1	34	10	1,212
1972	1	100		54	2	407	1	60	2	1,680	6	2,301	1	440	6	1,383	13	4,124
1973	2	770			4	976					6	1,746	2	561	7	903	15	3,210
1974	2	314			1	713			2	440	5	1,467	2	100	6	5,804	13	7,371
1975		79		49			2	189	1	270	3	587		800	2	1,032	5	2,419
1976			1	300				24	2	1,926	3	2,250	3	1,195	2	1,015	8	4,460
1977	1	100	2	622	2	331	3	9,280		784	8	11,117	3	1,650	2	1,022	13	13,789
1978	1	238			1	409					2	647	1	3,270	5	1,279	8	5,196
1979	1	145		971	1	300			2	3,700	4	5,116	1	620	7	3,628	12	9,364
1980		20			4	2,794				120	4	2,934	8	35,130	5	4,041	17	42,105
1981		72			1	736				1,960	1	2,768	5	1,645	4	6,351	10	10,764
1982					1	96			1	8,960	2	9,056	2	2,500		76(2)	4	11,632(3)
Total	23	4,901	18	3,083	21	7,928	8	9,863	11	19,875	81	45,650	30	48,111	56	30,000	167	123,761
(%)	(13.8)	(4.0)	(10.8)	(2.5)	(12.6)	(6.4)	(4.8)	(8.0)	(6.6)	(16.1)	(48.5)	(36.9)	(18.0)	(38.9)	(33.5)	(24.2)	(100.0)	(100.0)

Notes: Investment amounts in this table, where there is no numbers for projects, are the increased amounts of former cases
(1) The original source figure of 359 should be 350. (2) The original source figure of 29,976 should be 76. (3) The original source figure of 11,662 should be 11,632.

Source: Taiwan Research Institute, *Taiwan Survey 1983*, p. 261.

Appendix 5. Taiwan's FDI by Industry and Region, 1952–82

(Unit: $1,000)

Industry	Thailand		Malaysia		Singapore		Philippines		Indonesia		(ASEAN Total)		U.S.A.		Others		Total			
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	(%)	Amount	(%)
[I] Extractive Industries	1	200	1	13					1	225	3	438			2	3,781	5	(3.0)	4,219	(3.4)
1. Agriculture & Forestry	1	200							1	225	2	425					2	(1.2)	425	(0.3)
2. Fishing & Livestock			1	13							1	13			2	3,781	3	(1.8)	3,794	(3.1)
3. Mining																				
[II] Manufacturing Industry	22	4,494	14	2,987	20	7,691	7	9,763	10	19,650	70	44,585	14	37,921	30	21,489	124	(74.3)	103,955	(84.0)
4. Food & Beverages	6	1,401					1	250	1	1,500	8	3,151	1	240	4	4,153	13	(7.8)	7,544	(6.1)
5 Textiles	3	922	1	130	3	707			2	7,215	9	8,974			5	1,910	14	(8.4)	10,884	(8.8)
6. Accessories					3	565	1	60			4	625			3	124	7	(4.2)	749	(0.6)
7 Wood, Bamboo, Rattan, & Willow Products	1	199	3	1,981					2	785	6	2,965			1	1,000	7	(4.2)	3,965	(3.2)
8. Paper & Paper Products									1	5,880	1	5,880					1	(0.6)	5,880	(4.8)
9. Leather & Fur Products																				
10. Rubber & Plastics	1	60	1	80	3	1,256	1	69	1	270	7	1,735	2	6,000	4	1,486	13	(7.8)	9,221	(7.5)
11. Chemicals	2	245			2	851	2	9,180	1	3,600	7	13,876	1	24,000	1	200	9	(5.4)	38,076	(30.8)
12. Non-metallic Products			2	114	2	1,432	1	104			5	1,650	1	461	4	8,405	10	(6.0)	10,516	(8.5)
13. Basic Metals & Metal Products	2	811	3	227	3	842			2	400	10	2,280	2	740	4(1)	628	16	(9.6)	3,648	(2.9)
14. Machinery Equipment			1	122							1	122	2	250			3	(1.8)	372	(0.3)
15. Electronics & Electrical Appliances	4	856	3	333	4	2,038	1	100			12	3,327	5	6,230	4	3,583	21	(12.6)	13,140	(10.6)
[III] Service Industry	3	207	3	83	1	237	1	100			8	627	16	10,190	24	4,730	48	(28.7)	15,547	(12.6)
16. Construction				65							1	65			5	1,914	6	(3.6)	1,979	(1.6)
17. Trade	3	207	2	18	1	237	1	100			7	562	12	9,350	15	1,495	34	(20.4)	11,407	(9.2)
18. Finance & Insurance															1	1,050	1	(0.6)	1.050	(0.9)
19. Transportation																				
20. Services													2	750	1	116	3	(1.8)	866	(0.4)
21. Others													2	90	2	155	4	(2.4)	245	(0.2)
Total	23	4,901	18	3,083	21	7,928	8	9,863	11	19,875	81	45,650	30	48,111	56	30,000	167	(100.0)	123,761	(100.0)

(1) The original source figure of 1 should be 4.
Source: *Taiwan Survey, 1983*, p. 262.