# Direct Investment in South-East Asia by the NIEs: Trends and Prospects

#### I. Introduction

This paper provides a brief review of trends in foreign direct investment (FDI) in Asia by the newly industrializing economies (NIEs) of the region. The focus is on the four leading NIEs: Republic of Korea, Taiwan Province of China, Hong Kong and Singapore. These are not the only sources of FDI from developing countries in Asia (almost every country has some overseas direct investments), but they are by far the most important. In the past decade, they have been among the most dynamic foreign investors in South East Asia, and today constitute the largest or second largest sources of foreign capital in every developing host country in the region (Hill, 1990, has a comprehensive survey of FDI in East Asia).

Such performance by the NIEs in exporting direct investment is due to three factors. The first is the high level of industrial efficiency in the activities they have chosen to specialize in. The second is their strong outward orientation, which has given their industrial firms constant contact with foreign locations and exposed them to intense international competition. The third is their rapidly changing cost and technology configurations (and so comparative advantages), which have created the need for them continually to restructure their domestic industries and move the production of less competitive products offshore. Part of the restructuring involves relocating labour-intensive, relatively low technology activities to low-wage areas. Part requires placing final manufacturing operations near the new markets opening up in the fast growing areas of South-East Asia.

TABLE 1

However, some relocation is at the upper end of the production spectrum. It involves joint ventures with transnationals of developed countries, based on a division of labor between high-tech firms and those experienced in production in developing countries. Substantial direct investments are also being made in the markets of OECD countries, but these are not discussed here.

The balance between these different motives and pressures driving FDI from the four NIEs differs according to their economic strengths and weaknesses. The four NIEs are not homogeneous in their industrial strategies and their varying approaches to industrialization show up in their patterns of overseas production. The differences between them are often obscured by the widespread tendency to lump them together under general labels, which may then lead to similar predictions about their performance. It is important, in predicting future flows and implications of FDI to Asia, to understand these differences.

Part II of this paper describes recent FDI performance by the four NIEs, and analyzes their "revealed comparative advantage" in overseas production in terms of domestic industrial structures and strategies. Part III draws upon this analysis to look at future FDI by the NIEs. Part IV closes with the main conclusions.

# II. Patterns and Nature of FDI by NIEs

The most relevant data on direct investment by the NIEs pertain to the 1980s. Table 1 sets out the available information, collected from a variety of sources. The problems involved in quantifying accurately investment flows by developing countries are well known and, of the four countries shown, only Korean official data bear some resemblance to reality. Taiwan publishes data on "approvals", but these are officially acknowledged to be about one-tenth of actual outflows. Hong Kong and Singapore do not collect and publish FDI outflow figures.

In view of these problems, a better indicator of FDI appears to be data collected by host countries (mostly approvals, so again subject to overstatement of actuals) and from news reports. However, no strong claims of reliability can be made, especially for Taiwan, which seems to have invested massively abroad in 1989 and 1990 and may

now be the largest investor in the group. With these caveats in mind, let us examine the tendencies revealed.

DIRECT INVESTMENT BY NIEs IN THE 1980s

Taiwan Hong Kong TOTAL Destinations Singapore Korea Province Malaysia 53.5 134.2 61.2 8.5 257.3 1,361.0 281.0 303.0 179.0 2,124.0 Indonesia Thailand 1,937.9 827.8 2,015.8 199.1 4,080.6 Philippines 50.5 102.2 152.7 n,a, n.a. 8,400.0 292.0  $1.200.0^{1}$ China 47.8 Bangladesh 17.4 24.2 89,4 n.a. Sri Lanka 168.9 36.0 2.0 1.1 208.0 Sub total 11,119.6 1,588.4 3,684,2 411,9 16,804.1 Hong Kong 73.8 30.9 n.a. 104.7 540.6 8.5 549.1 Singapore n.a. Taiwan Province 400.5 67.9 468.4 Korea 121.6 29.5 3.5 154.6 1.062.7 171.2 42.9  $(83.8)^2$ 1,276.8 Total NIEs Total S.E. Asia 12,128.3 1,759.6 3,727.1 495.7 18,080.0 Total World 9,000 1,628 n.a. Of which OECD (%)3 50-60 55.4 (Below 50%) (Below 50%)

Notes: 1 Figure quoted in Financial Times, "Survey of Taiwan's Economy", May 17, 1990.

Sources: Whitmore, Lall and Hyun (1989), based on host country approvals data; newspaper reports; Korea Development Bank, KDB Report, 14:7, July 1990; UNCTC (1990).

Hong Kong: Until 1989, Hong Kong was by far the largest investor in Asia, and probably in the developing world (as noted, Taiwan may now have caught up). While Hong Kong investments were fairly widely spread through neighboring countries, by the mid-1980s China had assumed an overwhelming position as a recipient of Hong Kong FDI. According to Chinese government data on actual

<sup>&</sup>lt;sup>2</sup> Total for South-East Asian investments and total foreign investments by Korea from KDB Report,

<sup>&</sup>lt;sup>3</sup> For Hong Kong and Singapore there are no data available on which to base an estimate, but UNCTC (1990) suggests that most of it is directed to developing countries. For Taiwan, estimate is based on UNCTC (1990), para. 30. However, FDI outflows in 1989 alone from Taiwan may have reached \$10 billion (according to local estimates quoted in the *Financial Times*, "Why Taiwan is Not Another Japan", September 12, 1990, p. 21) and may top \$15 billion in 1990. Thus, totals for Taiwan may be gross underestimates.

FDI in the five years 1984-88, Hong Kong investment came to \$6.5 billion, 61% of total inflows of \$10.8 billion. Estimates by Hong Kong's Trade Development Board (given in Whitmore *et al.*, 1989), place Hong Kong's equity stake in China at \$8.4 billion by mid-1989 – the two figures seem reasonably compatible. Indonesia and Thailand are the other main destinations for Hong Kong investments, followed by two other NIEs, Singapore and Taiwan.

While services and trading are significant in Hong Kong's investments, there is no reason to expect that its predominantly manufacturing composition has changed since the early 1980s (Chen, 1983). Certainly, its Chinese activity is almost entirely in manufacturing. Within manufacturing, there is a fair spread of activities, but the bulk is concentrated in Hong Kong's own major industrial strengths: textiles, garments, light electronics and plastic products. The main exception to this seems to be resource-seeking investments in chemicals, basic metals, paper and non-metallic minerals, but overall the competitive edge of its enterprises lies in managerial and marketing advantages acquired in making and selling light consumer goods. (Chen, 1983).

That such advantages (termed "ownership" advantages in the literature) exist and are backed by very dynamic entrepreneurship, is borne out by the sheer size of Hong Kong's overseas investment stock (its equity in Asia alone is about equal to Italy's total stock of \$12.4 billion in 1985). The geographical distribution of its FDI reflects ethnic and locational (proximity and labour cost) factors: the "Chinese connection" is very pervasive (Whitmore et al., 1989; Hill, 1990). Cultural and linguistic links make operations in the neighbouring Guandong province of China very attractive, while links with the Chinese business community in locations further afield make the transition easier. The magnitude of outward investment is so large that Hong Kong employs some two million workers in China alone (compared to around 850,000 within Hong Kong). If its other overseas locations account for around one million employees, Hong Kong firms employ some 31/2 times more people abroad than at home - surely the highest extent of internationalization of production anywhere in the world.

The conventional approach to TNCs may suggest that an economy with such a powerful international projection in manufacturing would possess a diversified industrial base with considerable depth and technological capability (Dunning, 1988). This is clearly not the case with Hong Kong. Its advantages are based on mastery

of imported technologies for light consumer goods assembly and manufacture (Wells, 1983, proposes a theory of Third World MNCs which fits the Hong Kong case nicely). Most of its firms are very small by international standards (though its leading investors may be large by standards of developing countries), conduct little or no research and development and lack the ability to diversify into more complex, technologically demanding activities. This does not restrict their ability to set up facilities overseas as their own costs (wages and rents) rise, using their efficiency and specialized skills to compete internationally. What it does restrict is the ability of Hong Kong's domestic industrial structure to upgrade and deepen in response to rising costs. Some upgrading does occur within Hong Kong's specialization (from low to high quality garments, for instance), but this faces limitations in comparison with countries like Korea (see below) which can diversify into much more heavy, complex industry.

Hong Kong's economic structure has been shaped by its unique history (entrepot trade, good education structure, stable administration, presence of large British trading and service companies with considerable spillover effects, early immigration of large numbers of skilled textile engineers and entrepreneurs from Shanghai) and its laissez faire economic policies. Its skill base and trading background have allowed it rapidly to enter and master "easy" technologies for serving world markets. However, its lack of explicit support for industrial deepening and technological activity constricted its capability development along specialized and narrow lines, both by activity and by depth of technical knowledge (Lall, 1990).

This constriction puts more pressure on Hong Kong to internationalize its production than a country of similar size (in terms of population) but with greater technological depth, like Switzerland. The latter can retain a strong manufacturing and exporting base by constant upgrading of its activities, while simultaneously setting up foreign production facilities. Hong Kong faces the prospect of slowly having to wind down its industrial sector as competition grows in its major trading strengths, specializing in servicing its overseas affiliates (ignoring the possibility of changes wich could be brought about by the Chinese takeover in 1997). Its own manufactured exports are, according to its Trade Development Board (Survey of Hong Kong Re-Exports, 1988), only growing at 2-3% per annum, while exports made by Hong Kong firms in cheap labour areas are growing at 25-30%. As Chen (1989) argues:

In most respects, industrial diversification in Hong Kong has been slower than most of our competitors, viz., South Korea, Taiwan and Singapore. The technological base is also less advanced and sophisticated and Hong Kong lacks many supporting industries to enhance further development of our "older" industries such as electronics and plastics. This is largely the result of the Hong Kong government's non-intervention policy in its industrial development in the past. While it is true that such a non-intervention policy was probably the best for Hong Kong when it was undergoing an early stage of export-oriented industrialization in which labour-intensive products were the major exports, it is definitely time now for the government to reconsider such a policy ... With changing comparative advantage, Hong Kong has to diversify into higher technology and higher value-added products and industries (pp. 211-212).

In sum, therefore, Hong Kong's powerful outward projection is based on certain strengths but is also reflective of structural weaknesses in the domestic manufacturing base. It does, nevertheless, reflect competitive advantages in management, trade and finance which will continue to be exploited in FDI in service activities.

Singapore: Singapore's overseas profile is far lower than Hong Kong's. On a per capita basis, its FDI in Asia (as shown in Table 1) comes to \$676.8, compared to \$2165.8 for Hong Kong, and it is likely that its FDI in other regions is also much lower. This may seem surprising at first sight, because both are open, trade-based economies, pursuing liberal policies on FDI inflows and outflows – and Singapore has a much 'heavier' industrial structure (manufacturing contributes 29% of GDP, compared to Hong Kong's 22%, while machinery and chemicals contribute 54% of manufacturing value added compared to Hong Kong's 22%, according to data in the World Bank's World Development Report, 1989). This seems to point to greater ownership advantages in the Singaporean industrial sector.

A modest amount of research has been conducted on Singaporean transnationals in terms of their specialization and strengths (Pang and Komaran, 1985, Lecraw, 1985). In manufacturing they seem to be concentrated in some labour-intensive areas (electronics assembly) and food processing, though some heavier resource-seeking investments also exist (Whitmore et al., 1989, p. 12). The Singaporean Government is directly involved in several of the

country's larger foreign ventures. It is also possible that the data in Table 1 include investments by Singaporean affiliates of developed country firms, shifting the more labour-intensive parts of their operations to neighboring countries as costs rise in Singapore.

The data suggest that, contrary to expectations based on industrial structure, Singapore has a far smaller overseas projection than Hong Kong. The relative slack in FDI by Singapore may therefore reflect lower ownership advantages on the part of indigenous entrepreneurs. This weakness may be traced to two factors: first, local entrepreneurs have traditionally been weak in Singapore (which, unlike Hong Kong, never enjoyed the benefits of an influx of experienced industrialists from China); and second, the deliberate strategy of relying on developed country FDI to lead the economy into advanced industry, without providing specific promotion for local entrepreneurs in the advanced technologies concerned, further reduced their "ownership advantages" in areas where foreign firms were well established. Singapore moved quickly out of the simple, labourintensive consumer goods that were the mainstay of Hong Kong's entrepreneurial activity. Some indigenous development did take place (e.g. in food processing, packaging and other relatively simple activities), but this did not occur on a scale or level of technical competence to afford a significant ownership advantage in international markets. There are few large indigenous enterprises with broadly based technological strengths (Hill, 1990).

The regional distribution of Singaporean investments is rather similar to Hong Kong's, with the major difference of China. Proximity and the "Chinese connection" again play powerful roles (official data for its investments in Malaysia seem very low, and a lot of informal capital flows must take place between the two countries within the closely knit Chinese community). The government is seriously considering plans for a "triangle" of activity to include Singapore and neighboring areas of Malaysia and Indonesia, exploiting their relative skills and factor endowments (including the overwhelming foreign TNC presence in Singapore).

Singapore is attempting to induce foreign TNCs to upgrade their activities further, from capital/skill-intensive manufacturing into local design and development. To this end, it is gearing its (already high grade) education system to producing more and better technical skills, and offering various inducements to TNCs to undertake more training and local R&D. While this strategy has met with some

success, and Singapore's innovative base may be stronger than Hong Kong's, there are evident problems: the growth of local technological capabilities is entirely dependent on foreign investors (and government promotion), and thus runs the risk of being subject to forces outside its control. This form of R&D development, even if it can be raised significantly, may provide relatively few external benefits because it is likely to be tightly interwoven into the global R&D networks of the TNCs concerned, and is likely to be narrowly specialized in certain segments of the innovative process. More importantly for the present argument, it is unlikely to raise significantly the technological capabilities of indigenous firms.

Singapore's outward direct investments thus reflect, rather like Hong Kong, the strengths and weaknesses of its indigenous entrepreneurs and the particular industrial strategy adopted by the government. The strategy has been clearly successful in a general sense, using its location, infrastructure and skills (that are more advanced than Hong Kong's) to attract FDI and transform it into a high-income economy. However, the impact on indigenous entrepreneurship has been different from Hong Kong's. A technologically more advanced industrial base has tended to weaken rather than strengthen local entrepreneurs. This is true of manufacturing: in services the picture may be different, and Singaporean firms may well find this their future area of growth as the domestic economy moves increasingly into high tech services.

Taiwan Province: Taiwan appears to be the fastest growing overseas investor in the developing world. Until recently, its FDI was about equally distributed between developing countries (again neighboring ones) and developed countries (mainly North America), as Table 1 shows, but its emerging distribution is unclear. Much of this investment has gone into manufacturing, but natural resource extraction investments and services, together accounting for some 32% of total FDI, are also significant (but this is according to officially recorded flows, which are gross underestimates.)

The bulk of Taiwanese FDI by number is undertaken by its small and medium enterprises (SMEs), but there are a few large ventures, especially in the developed world, undertaken by its larger firms, which account for the bulk of its value until recently. Thus, about 73% of its manufacturing FDI came from chemicals and electronics (both led by large firms), according to official statistics. The Taiwanese industrial sector is largely populated by SMEs, which have

spread over a broad base of activity, from simple, labor-intensive to high-skill, technology-intensive ones. In heavy industry or other activities involving large economies of scale, Taiwan has some large private groups (as in consumer electronics, mini-computers and plastics) and several public enterprises (Taiwan has the largest public sector of the NIEs). Indigenous entrepreneurship is highly developed in Taiwan, and the government's interventionist strategy, of selective protection and promotion of areas of dynamic comparative advantage, has enabled it to diversify far more broadly than the two island NIEs. Its development has been based on high endowments of skill (especially technical) resources from the earliest stages of its industrial development, and this has permitted its diversification as well as the development of a variety of supporting institutions for skill and technology development and marketing (Lall, 1990; Levy, 1991).

The implications for the domestic economy of its overseas investment are therefore different from, say, Hong Kong. The diversity of the industrial sector and the vitality of local entrepreneurship, sustained by policies to intervene in support of technological deepening, mean that significant restructuring can take place on a sustained basis within Taiwanese manufacturing, with the main impetus arising domestically. However, the impact of restructuring on SMEs will depend on the ability of local survivors to upgrade rapidly into higher value-added activities; this will probably depend on the growth of small firms to large sizes, and even stronger interventions by the government to support the technology acquisition process. While the advanced technology infrastructure will enable many SMEs to cope, others may be able to restructure, as with Hong Kong, only by shifting production abroad and/or by moving out of manufacturing altogether. Unlike Hong Kong, however, Taiwan has many large enterprises, with differentiated products, advanced technological capabilities and far-flung sales networks. These are investing, partly in developing countries to take advantage of cheaper labour or natural resources, and partly in developed countries to establish market foot-holds, promote branded products, or gain access to advanced technologies (and, in some cases, also secure raw material supplies, e.g. paper or chemicals in the U.S.). The ownership advantages of these investors is very different from the previous set, and is more based on technological assets developed by investments in formal R&D training and interaction with the science and technology infrastructure (Lall and Kell, 1991).

The Taiwanese government, possessed of large foreign exchange resources and faced with the need for industrial upgrading (and, politically, the need to win friends) has, since 1985, taken to actively promoting overseas investment. Its regulations are extremely liberal, with each individual allowed to invest \$5 million per year abroad without permission. Since investment in China is not allowed officially, firms take advantage of the liberal climate to set up facilities there (and perhaps elsewhere) unofficially. This has led to something of a "splurge", with some firms rushing into overseas ventures and acquisitions without adequate preparation (Financial Times, September 12, 1990, p. 21): the recent crash in local stock markets and slowing down of export growth has cooled off some of this ardour.

In general terms, Taiwanese FDI has features of both Hong Kong as well as its larger neighbour, Korea (see below). Its large population of SMEs are similar to Hong Kong enterprises, many unable to upgrade domestically in the face of rising costs, and accounting for a growing part of its current overseas surge. Others are, however, likely to be able to upgrade because of the very high levels of skills and technology support available locally, and their future foreign investments will show higher technological content. Its large firms, on the other hand, have many advantages similar to TNCs from Korea (and the developed countries), but these are relatively few in number and not possessed of the size or diversity of their Korean counterparts. Nevertheless, they will grow domestically and overseas in very sophisticated activities. The long-term future of Taiwanese industrial development depends in large part on how rapidly one form of FDI can be transformed into the other.

Republic of Korea: Korea is the smallest overseas investor of the four NIEs, though it has the largest, heaviest and most advanced industrial structure of the group. Its FDI reached a total of \$1.6 billion by April 1990, showing a very rapid increase from 1986, when it totalled only \$172 million. Within this, manufacturing FDI has increased even more sharply, from 17.1% of the total in 1985 to 45.3% in 1989 (Korea Development Bank, 1990). Primary sector investments account for another 33.2%, with trading, transportation, construction and real estate investments making up the remainder. By destination, the U.S. is the largest host country (43%), followed by S.E. Asia (30.5%). Other regions took much smaller investments: Australia 7.1%, Middle East 6.0%, Europe and Latin America 5.2% each, and Africa 2.4%. However, its overall geographical spread seems broader than for other NIEs.

Large firms account for the overwhelming bulk (90%) of Korean FDI, showing a far higher level of concentration than other NIEs. This mirrors a high level of market concentration within the country - the Korean manufacturing sector is dominated by a relatively small number of private conglomerate groups (chaebol), with overall concentration levels higher even than in Japan (and much higher than in Taiwan). Such a structure is the deliberate creation of the government, which utilized a highly interventionist strategy to push industry into very large-scale, complex, technologically demanding activities, at the same time restricting FDI inflows very tightly to promote national ownership. It was felt necessary to create enterprises of large size and diversity, to undertake the risk incumbent upon launching investments in high-technology, high-skill activities that would remain competitive in world markets. The chaebol acted as the interlocutors and spearheads of the government's strategy, and were supported by protection (against imports and TNC entry), subsidized credit, procurement preferences, as well as massive investments in education, infrastructure and a science and technology network (World Bank, 1987).

These characteristics of Korean strategy make it unique among developing countries, giving its industry a level of technological depth and competitive prowess perhaps unmatched in the Third World (Lall and Kell, 1991). The very high initial levels of intervention have left an industrial structure that is now capable of more autonomous development than, say, Taiwan's, which experienced less intervention earlier but needs more now to overcome high entry barriers in advanced activities. They also account for the preponderance of giant firms in its overseas investment activity which, in turn, may account for its wider geographical dispersion (geographical proximity is still an advantage, but there is no "Chinese connection").

They may, contrary to expectation, also explain Korea's lower FDI profile in comparison with economies with smaller ownership advantages. The pressure on the *chaebol* to relocate to cheaper production bases overseas is far less (for a similar rise in wages or currency appreciation) than faced by economies with a higher proportion of SMEs in lower-technology activities. There are, naturally, a number of Korean SMEs in labour-intensive industries which face such pressures, and are now starting to respond like their Hong Kong or Taiwanese counterparts – but these account for a small proportion of Korea's total foreign projection. FDI by the *chaebol* is more

directed at establishing market shares in host countries (in S.E. Asia and the developed countries) or gaining access to new technologies and skills, and to a lesser extent to gain cheaper labour.

In view of such an industrial structure, it may be expected that there will be a spurt, relatively short-lived, of relocation by Korean SMEs in labour-intensive industries (as in Japan some two decades ago, which inspired the famous but ill-founded Kojima (1973) hypothesis that Japanese foreign investment was predominantly in mature, labour-intensive activities and led by small firms). This will be accompanied by domestic restructuring, as in Taiwan, but led by the established industry leaders and a new batch of higher-technology SMEs. Sustained growth in FDI has to come from the *chaebol* and, at a later stage, from the new generation of SMEs, with ownership advantages quite different from the present SMEs.

The ownership advantages of the chaebol derive, as noted, from high levels of investment in R&D, far exceeding levels recorded anywhere in the developing world. Thus, R&D financed by productive enterprises in Korea now comes to around 1.9% of GNP, compared to 0.6% for Taiwan Province, 0.2% for Singapore, or 0.1% each for Brazil and India (Lall, 1990). Korea's performance exceeds that of many OECD countries (Spain, Greece, Austria, Denmark, Canada, Australia). though it is still well below Japan's 2.7%. The link between this and Korea's restrictions on inward FDI must also be noted. Korea was second only to India in its low reliance on FDI inflows: as a percentage of GNP, foreign capital stocks in the mid-1980s came to 2.3% for Korea, 1-1.5% for India, 8.1% for Taiwan Province, 20-26% for Hong Kong, and a massive 53.8% for Singapore. Finally, it is worth noting Korea's extraordinary investments in skill creation; enrollments in tertiary education by 1985 came to 32% of the relevant age group, compared to 13% each for Taiwan and Hong Kong, 12% for Singapore, 11% for Brazil, 16% for Mexico and 9% for India. More relevant for industrial development is its relative investment in technical skills: tertiary enrollments in science and technology fields as a percentage of the total population came to 1.39% for Korea, 1.06% for Taiwan, 0.89% for Singapore, 0.67% for Hong Kong, and 0.21% for India (Lall, 1990; Lall and Kell, 1991).

It is this combination of high skill levels with intense technological effect, within giant conglomerate enterprises with powerful export drives and supported by an efficient science and technology infrastructure, that typified Korean industrial structure and per-

formance. Taiwan has some of these features, but not Korea's formidable combination of size and technological effort, both the direct results of the different patterns of intervention pursued by the two governments. The other NIEs differ far more from Korea.

In the long term, in sum, Korean international production will have many similarities to that of Japan, which it has emulated so successfully in other respects. After a slow start in comparison to its main competitors in East Asia, Korean FDI may be expected to become much stronger, especially in skill and technology intensive areas (though Hill, 1990, expects it to grow less than Taiwan's). The role of overseas relocation in facilitating domestic industrial restructuring and upgrading is smaller than in other NIEs, and FDI signifies growing industrial strength rather than, as in Hong Kong or Singapore, a development that signifies domestic deindustrialization.

### III. NIE Overseas Investments in the 1990s

All the indications are that overall FDI by the NIEs in South-East Asia will continue to grow in the 1990s. The factors making for the dramatic rise of their FDI in the past decade are still present and, if anything, are growing stronger. On the supply side, economic growth continues to be healthy in the NIEs, despite recession in some of their major markets. The competitive pressures that have driven FDI are intensifying, and the governments concerned are actively promoting overseas diversification. As investments abroad grow, there is a "snowball effect": investors gain confidence, there is more information available and the network of contacts abroad is stronger. On the demand side, similarly, improvements in investment climate, infrastructure, support services and skills in host countries in South-East Asia make fresh investments more attractive. The domestic markets of the "new NIEs" (with the possible exception of the Philippines) are set to keep growing. Many are rich in natural resources that the old NIEs lack. Thus, both export and domesticmarket oriented FDI are likely to grow. China, Thailand and Indonesia have been the major destinations so far. Political uncertainties aside, this pattern is likely to continue in the 1990s, though Malaysia should be able to raise its share.

These economic forces are likely to be strengthened by political moves to bring about closer coordination (even integration) of all the non-socialist economies in the region. The "triangle" comprising parts of Malaysia, Indonesia and Singapore has already been mentioned. The association of Korea with ASEAN is on the cards. Taiwan is, despite political impediments, a growing participant in economic activity in the region. The biggest uncertainty on the political horizon is the evolution of China and effect of its takeover of Hong Kong in 1997. The emergence of Vietnam as a market economy and better relations between North and South Korea, are future possibilities that bode well for FDI by the NIEs.

Given the generally encouraging outlook for NIE-FDI in the 1990s, there are likely to be significant differences between the four NIEs.

Hong Kong is likely to continue to move its manufacturing industry offshore and (1997 aside) to narrow its domestic manufacturing base. However, the process cannot continue indefinitely, and the optimal degree of restructuring is likely to be reached before the decade is out (the current brain drain the colony is experiencing will speed up the process). Given the meagre domestic technological base of Hong Kong multinationals, the affiliates are likely to take on a life of their own if they can establish technology or skill bases overseas, and their focus is likely to shift from manufacturing to services. Hong Kong may become increasingly a conduit for FDI originating in other countries, a function it already serves in China. After 1997, China may use Hong Kong's network of contacts as a base for its own FDI. In the longer term, Hong Kong is likely to lose the pre-eminent position it has held among Third World capital exporters. However, for the time being it will continue as a major source of investments in light, export-oriented industry.

Singapore is likely to remain a significant but not major player in the FDI game in South East Asia. Its overwhelming reliance on developed country TNCs means that its own firms are unlikely to develop strong new "ownership advantages" in manufacturing industry. In this area, the island may (like Hong Kong) increasingly serve as a base for FDI and joint ventures by investors from other countries. The future of Singapore will lie increasingly in sophisticated services, and here it is set to become the hub of a widespread network of financial, shipping, information, repair and other services (to a greater extent than Hong Kong), as well as the basis of its own overseas investments. Its manufacturing base will project itself, not so

much by FDI by Singaporean firms, but by drawing in neighbouring areas into the established infrastructure that exists in the island (this is the essence of the proposed triangle with Malaysia and Indonesia). The critical inputs will thus continue to be provided by OECD MNCs.

Taiwan is likely to see the growth of both strands of its present FDI - low technology activity by SMEs and more sophisticated investments by its large firms (and some "restructured" SMEs). Over the course of the decade, the thrust is likely to shift from the first to the second, as the primary restructuring reaches its desired level. It is difficult to predict how rapidly the new form of FDI will grow in the Asia-Pacific region. Much depends on the ability of domestic enterprises to upgrade and the effectiveness of support provided by the Taiwanese government. If political relations with China improve and permit a more open and liberal climate for Taiwanese investments on the mainland, the "broadening" of Taiwan's FDI (by low tech firms) could go on for quite a long time. However, given the large domestic industrial base, Taiwanese activities in China would encompass more heavy, large scale industry than is the case for Hong Kong (petrochemicals is a good example) and could involve very large amounts of capital. In other areas, Taiwan seems set to play a steadily growing role in industrial FDI.

Korea appears to hold the best prospects for sustained growth of FDI over the nineties. This is partly because its present base is smaller. It is also because of its concentrated and advanced industrial structure, with the chaebol able to muster vast resources and deploy a range of sophisticated technologies. The main attraction of South-East Asian host countries to Korea would be less cheap labour per se (though many small Korean enterprises would target this) than promising domestic markets and the availability of natural resources. Over time, however, cheap skilled labour should also become an attraction for complex manufacturing activities, rather on the pattern of recent Japanese investments. In the absence of a "Chinese connection", however, Korean firms are likely to cast their net over a wider area; their growing interest in Eastern Europe is a reflection of their "muscle" and their lack of regional attachments.

All these prognostications are, needless to say, highly speculative. They are based on a particular reading of the underlying strengths of the various NIE investors and on assumptions of continued growth and stability in the region.

## IV. Conclusions

The recent growth of direct investments by the NIEs is a reflection of their growing capabilities in modern industrial and service activities and their sustained exposure to international trade. It is also an indication of structural changes in their economies, as some of their "sunset" industries are relocated in more economical sites in other countries while some of their "sunrise" industries establish affiliates in beachheads in promising markets or centres of advanced technology. The pattern of FDI by the NIEs in South-East Asia reflects a mixture of these tendencies.

Rather like the early surge of Japanese overseas investment, there is a preponderance of labour-intensive, relatively low technology activities in the current wave of FDI, led largely by small, export-oriented companies. There is, however, a new wave of investors which are similar to the TNCs of developed countries, led by very large firms and specialised in capital- and skill-intensive activities. If the Japanese experience is any guide, the early wave is in the nature of a once-for-all adjustment to rising costs and changing comparative advantage, while the new wave is likely to be sustained over the longer term, if supported by technological and skill upgrading in the home country.

The four NIEs vary considerably among themselves in their balance between the two kinds of FDI (considering only indigenous investors). Hong Kong is at one extreme, with the great bulk of its FDI in simple, undifferentiated, low technology operations which lack a domestic base of growing "ownership advantages" in manufacturing (though they may well generate such advantages in services). Korea is at the other, with its giant *chaebol* spear-heading its FDI drive, based on significant and growing ownership advantages in technology, skills and differentiated products. Taiwan has a mixture of Hong Kong and Korean style FDI. Singapore is closer to Hong Kong, despite its much "heavier" industrial structure, because its indigenous enterprises are specialized in relatively simple activities; however, its FDI lacks the dynamism of Hong Kong's because of the small role of local entrepreneurship in the domestic economy.

Over the medium to long term, the FDI performance of these countries is likely to reflect these structural features. Hong Kong is likely to continue to be a major investor in the near future, with an

added impetus coming from its impending takeover by China. Even if this political factor did not exist, however, its FDI in industry is likely to slow down as the adjustment to its changing comparative advantage matures and the economy moves into services. Taiwan is likely to take over its role as the main investor in the developing world in the medium term, with a mixture of low and high technology activities. Its longer-term FDI will depend on how successfully its economy transforms its structure from one to the other. Korea appears to have the best potential base for creating TNCs in the Western mode, and is likely to become the largest investor in the long term. Singapore seems set to play a significant but minor role, with a growing emphasis on service activities.

For the time being, however, the four together will continue to be dynamic agents for growth and export expansion in the region.

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