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4 Accounting for Outward Direct Investment from Hong Kong and Singapore: Who Controls What?

Linda Low, Eric D. Ramstetter, and
Henry Wai-Chung Yeung

4.1 Introduction

Hong Kong and Singapore provide a unique opportunity to examine the implications of different methods of classifying investments by multinational corporations. On the one hand, classifying investments by country of ownership, that is, by country of the owner of the investing parent firm, has gained increasing acceptance and is now widely used in the compilation of U.S. and Singaporean data, for example. This method differs from classification by country of capital source when the investing firm is owned by a firm from a country other than the country of capital source and seems clearly advantageous when, for example, investments are channeled through holding companies in tax havens like the Netherlands Antilles and the Cayman Islands. In Hong Kong and Singapore, a significant amount of investment is also channeled from foreigners through local holding companies to other foreign countries. In these two economies, however, there is also a large amount of outward investment made by foreign-controlled companies that have long histories in one or both of these economies. Moreover, such firms are often largely controlled and operated by long-term residents of the host economy who are empowered to take a wide range of decisions, including decisions to invest abroad. These characteristics, combined with the increasing sophistication of local firm management in each of these host economies, mean that foreign-controlled overseas investors may

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sometimes have more in common with locally controlled overseas investors than with their foreign parents. One possible implication of such behavior is that accounting by country of ultimate beneficial owner may be less enlightening than accounting by geographic source of investment in some cases.

The purpose of this paper is thus to illustrate, by examining the Hong Kong and Singapore examples, the nature of the problems encountered when trying to decide how to classify foreign investors by ownership. The paper outlines the rationales behind various classification rules (section 4.2) and summarizes the published information on outward investments from Hong Kong and Singapore by ownership (section 4.3). It then examines several cases of outward investment by foreign-controlled firms from these economies (section 4.4) and summarizes the major results that emerge (section 4.5).

4.2 Economics and Accounting for Sources of Foreign Direct Investment

What must be considered when foreign direct investment (FDI) is classified by its sources, and what are the implications of various classification schemes? Broadly stated, there are two primary ways of classifying FDI by source, classification by country of capital source and classification by country of ownership. Classification by country of capital source may be viewed as having its logical basis in international economics, which has emphasized the importance of cross-border transactions, especially international trade. Moreover, accounting by country of capital source is the traditional way in which international transactions have been handled in the balance of payments. The advantages of this accounting method include its suitability for a focus on the relationships among international transactions and economic activity (e.g., employment) in a specific location and its relative ease of implementation, as one needs only to measure cross-border transactions. On the other hand, there are also several drawbacks, the most important of which are difficulties encountered when a large amount of entrepôt activity is involved. In this context, accounting for the large amounts of outward investment from so-called paper companies in tax havens is the entrepôt activity of primary concern. However, the principal question involved in accounting for any entrepôt activity is the same: Just where is it most reasonable to view a given activity, be it trade or investment, as originating?

Accounting by country of ownership is a method of accounting that has been devised primarily as a means of dealing with the problem of entrepôt investments. Indeed, in its simplest form, accounting by country of ownership can be thought of as a means of understanding sometimes large outward investments from relatively small tax havens and is based on the premise that it makes little sense to attribute such investments to the tax havens themselves. Although the distinction may not be very important economically in the cases of portfolio investments, in the case of direct investments it is potentially sig-

nificant. FDI is distinguished from portfolio investment in that it implies a greater degree of foreign control and in the case of FDI, most of the economic effects of that investment are thought to result, not from the capital flow involved, but from the transfer of knowledge-based, intangible assets (e.g., production technology, marketing networks, management know-how, and other similar assets) that accompanies the capital flow.[1] If the nature of these intangible assets depends on the country of the investing parent firm, it then becomes important to establish the source of investment because investments from different home economies may be expected to have different characteristics.[2] Correspondingly, in relatively simple cases, for example when a 100 percent U.S.-owned firm in the Cayman Islands undertakes an investment in Thailand, for most purposes it is clearly more reasonable to attribute such investment to the country of the owner than to the geographic source. However, this accounting can soon become quite complicated, especially in highly developed entrepôt centers like Hong Kong and Singapore, and this paper seeks to illuminate some of the gray areas involved in such cases.

One of the gray areas involves multiple ownership. For example, in Hong Kong and Singapore there are several cases of outward investment by firms that are the result of joint ventures between firms from two or more home economies. Furthermore, these joint ventures often involve several partners, none of which has a majority holding. In such cases, it is clearly impossible to unambiguously classify such FDI by country of ultimate beneficial owner.[3] A second gray area surrounds the issue of management control. In sophisticated entrepôts like Hong Kong and Singapore, one rarely sees simple entrepôt investments. Much of the reason for this is that high costs of doing business in these two city-states make it relatively expensive to establish and maintain paper companies in these two economies. On the other hand, firms in these economies, both local and foreign, are often very sophisticated, and there can be large benefits from entrepôt investment that involves a crucial resource contribution from the affiliate through which the investment is being conducted. At the extreme, such entrepôt investments may be entirely planned and managed by the staff of the affiliate with minimal assistance from the company's foreign parent. In such cases, the distinction between geography-based and ownership-based classifications may become clouded because the characteristics of the geographic source of investment may have more bearing on the nature of intangible assets transferred through such investments than do the characteristics of the ultimate parent firm. On the other hand, even if a high degree

1. See Caves (1982), Dunning (1993), and Markusen (1991), among others, for related theoretical analyses.

2. E.g., Kojima (1990) and Ozawa (1979) have argued that Japanese FDI is different from U.S. and European investments in a number of ways.

3. Moreover, given the international convention of defining FDI as a foreign investment where foreign ownership shares exceed a given minority percentage (usually 10 to 25 percent), there is substantial potential to double count such investments, attributing them to more than one home economy.

of autonomy is observed in the investing firm, this autonomy may only be a result of corporate organizational strategy, and one may argue that it is still preferable to classify such investments by country of ultimate beneficial owner.

In any case, the general lack of empirical analysis of this topic makes it of some interest to evaluate (1) how much of the outward FDI from Hong Kong and Singapore is by foreign-controlled firms and (2) how much of the outward FDI by foreign-controlled firms is by firms that exhibit a good deal of local control.

4.3 An Overview of Outward Direct Investment from Hong Kong and Singapore

According to traditional geography-based accounting, Hong Kong and Singapore were rather minor sources of the world's outward FDI flows throughout the 1980s, though they were among the major investors from the developing world. Between 1981–84 and 1988–90, the world experienced a more than fivefold increase in average annual FDI outflows, with shares of Asian economies rising from 13.8 to 24.8 percent (table 4.1). Japan and Taiwan accounted for the bulk of this increase; the combined shares of the two economies rose from 11.5 to 22.2 percent. Shares for Hong Kong and Singapore were larger than those for most other developing economies and regions as early as 1981–84 (1.2 and 0.3 percent, respectively) and remained rather stable throughout this period. Hence the absolute level of outward FDI flows from these economies increased markedly in this period.[4] In more recent years, Hong Kong has seen its share increase from 1.4 percent in 1988–90 to 5.3 percent in 1991–93, mainly as a result of its large contributions to the FDI boom in China. Singapore's outward FDI flows and shares of the world total have actually declined somewhat in this recent period. In summary, Hong Kong and Singapore were the among first Asian countries outside of Japan to make substantial outward investments, and high levels of FDI from these economies, combined with rapid growth in outflows from Korea and Taiwan, have made Asia's newly industrializing economies (NIEs) an increasingly important source of FDI in recent years.

4.3.1 Hong Kong

In view of Hong Kong's rather large outward FDI, it is perhaps surprising that the Hong Kong government does not keep any comprehensive records on outward FDI. Thus, before trying to evaluate how much of Hong Kong's outward FDI is undertaken by foreign-controlled firms, it is first necessary to esti-

4. Since, as noted in table 4.1, 1981–84 figures for Hong Kong exclude investments in China, the growth of the Hong Kong share is exaggerated somewhat. Note that this is also true for Malaysia, but China's share of Malaysia's FDI is much smaller than its share of Hong Kong's FDI.

Table 4.1 **Estimated Outward Flows of Direct Foreign Investment by Investing Economy**

Investing Economy	1981–84	1985–87	1988–90	1991–93
World	41,610	97,061	214,022	198,506
Africa	289	105	81	120
Asia	5,743	16,161	53,073	37,094
Japan	4,755	13,483	42,140	20,573
Asian NIEs	741	2,130	9,809	14,368
Hong Kong	489	1,529	3,090	10,504
Korea	88	109	425	1,153
Singapore	119	208	856	653
Taiwan	46	283	5,438	2,058
Other Asia	246	548	1,124	2,153
China	68	574	820	1,638
Malaysia	178	−88	211	344
Pakistan	−1	3	19	−6
Sri Lanka	0	1	2	5
Thailand	2	57	71	172
Europe	23,986	52,074	123,745	108,568
Latin America	245	325	687	1,374
Middle East	197	411	668	1,371
North America	10,117	24,312	31,800	48,944
Oceania	1,034	3,672	3,968	1,034

Sources: Data come from International Monetary Fund (various years) balance-of-payments data or are adjusted to be, in principle, consistent with those data. For Thailand, 1993 data come from Thailand, Bank of Thailand (various years). For Hong Kong and Malaysia, estimates are based on data from selected recipients of outward FDI from these economies (see table 4.2). For these two countries, note that 1981–84 figures exclude FDI in China, while figures for subsequent years include it; this exclusion is large for Hong Kong but not large for Malaysia. In any case, figures for both these economies are underestimates as FDI in only a few selected host economies is covered.
Note: Figures are in millions of U.S. dollars.

mate the magnitude of Hong Kong's outward FDI. To estimate the size of total outward FDI from Hong Kong, we have collected data on inward FDI from nine of the major recipients of Hong Kong's outward FDI. Since definitions differ greatly among host countries, an attempt has been made to adjust the data to be consistent, in principle, with balance-of-payments estimates of FDI flows, such as those presented in table 4.1 (see table 4.2 for details). According to these estimates, since the mid-1980s China has emerged as by far the largest host to Hong Kong's FDI, its share of stocks in the nine economies rising from 9 percent in 1984 to 54 percent in 1988 and 75 percent in 1993. Viewed from the Chinese side, Hong Kong's share of total inward FDI stocks in China rose from 11 percent in 1984 to 49 percent in 1988 and 61 percent in 1993.

Note also that there is significant investment from China to Hong Kong, with stocks of Chinese FDI in Hong Kong's manufacturing industries alone rising from $365 million (U.S. dollars) at year-end 1985 to $534 million at

year-end 1992, these amounts representing 18 and 11 percent, respectively, of the total FDI stocks in Hong Kong's manufacturing.[5] Furthermore, it seems likely that Chinese investments in Hong Kong's service industries are several times larger than investments in manufacturing, though we have no hard figures to support this assertion. The observation of significant Chinese FDI in Hong Kong is consistent with the often-heard assertion that much of what the Chinese record as FDI from Hong Kong is in fact investment originating in local Chinese firms but circulated through Hong Kong in order to benefit from the incentives offered to foreign investors. In this respect, Hsueh and Woo (1991, 484; see also Shih 1989) indicate that at least 40 percent of Hong Kong's investment in China is from China-involved companies in Hong Kong and that China's banking groups are a large source of this investment. Moreover, there is also significant indirect FDI in China by foreign-controlled firms in Hong Kong, with Wong, Chen, and Nyaw (1991, xxix) citing Chinese figures that 30 percent of Hong Kong's FDI is of foreign origin. Although certainly not comprehensive, these figures suggest that accounting by country of ultimate beneficial owner would substantially reduce estimates of Hong Kong's FDI in China.

Similarly, indirect FDI through Hong Kong is also an important element of Hong Kong's FDI in other economies. Table 4.2 indicates that after China, Singapore was the second largest host to Hong Kong FDI in 1993, followed by the United States, Malaysia, Thailand, Indonesia, and Taiwan. Stocks were much smaller in the Philippines and Korea and even smaller in most other host economies for which spotty information was obtained.[6] This ordering represents a change from 1984, when Malaysia was the largest host, followed by Singapore and more distantly by the United States. In other words, these estimates indicate that Singapore and Malaysia, and to a lesser extent the United States, have historically been the most important destinations of Hong Kong's FDI, while Thailand and Indonesia, as well as China, have been more important in recent years.[7]

Some of the earliest outward investment from Hong Kong occurred in the nineteenth century when some British-controlled banks in Hong Kong extended their operations to Southeast Asia in order to serve increasing British

5. Data on FDI stocks come from Hong Kong, Industry Department (1993) and are translated into U.S. dollars using end-of-period exchange rates from International Monetary Fund (1995).

6. The only other host economies in which substantial FDI stocks from Hong Kong are known to exist are Canada ($1,261 million in 1990) and Australia ($556 million in 1990; International Monetary Fund 1995; United Nations 1993, 1994). In the United Kingdom, FDI stocks from developing Asian economies rose from $1,712 million in 1987 to $3,771 million in 1991 (United Kingdom, Central Statistical Office 1991), and we suspect that a substantial portion of this FDI is from Hong Kong. Japanese figures on approved FDI also indicate rather large FDI stocks from Hong Kong ($613 million as of 31 March 1993), but on a worldwide basis, actual stocks at year-end 1992 were only 58 percent of total approved stocks as of 31 March 1993, so actual FDI stocks are likely much smaller than approved stocks (International Monetary Fund, various years; Japan, Ministry of Finance 1993).

7. For details on Hong Kong's investment in Southeast Asia, see Yeung (1994, 1995, 1996).

Table 4.2 Estimated Flows and Stocks of FDI from Hong Kong to Selected Host Economies

Host	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Stocks of FDI from Hong Kong (million U.S. $)										
Subtotal	3,832	4,692	6,036	8,420	11,113	14,509	17,689	22,171	31,827	49,200
China	341	1,151	2,284	3,882	5,978	8,055	9,969	12,456	20,269	36,684
Indonesia	275	272	298	337	393	459	632	876	1,192	1,442
Korea	31	38	46	86	104	116	131	137	150	162
Malaysia	1,208	1,308	1,491	1,370	1,322	1,464	1,510	1,938	2,429	2,186
Philippines	43	48	48	67	126	163	198	239	253	301
Singapore	986	881	765	1,000	1,197	1,480	1,806	2,127	2,568	3,016
Taiwan	162	181	214	301	418	585	722	825	950	1,070
Thailand	213	236	273	304	414	637	911	1,365	1,937	2,109
United States	574	576	617	1,073	1,161	1,549	1,808	2,210	2,078	2,229
Hong Kong's Share of Total FDI Stocks (%)										
Subtotal	2.3	2.5	2.7	2.9	3.0	3.2	3.4	4.0	5.3	7.4
China	11.1	24.4	34.6	43.6	49.4	52.0	52.5	53.3	59.0	60.7
Indonesia	9.2	8.2	8.3	8.5	8.7	8.8	10.0	11.2	12.5	12.5
Korea	2.8	2.9	2.6	3.6	3.2	2.9	2.8	2.4	2.4	2.4
Malaysia	13.5	13.6	14.8	13.0	11.8	11.3	9.9	10.1	10.2	7.8
Philippines	5.6	6.1	5.3	5.5	5.9	6.0	6.1	6.3	6.3	6.3
Singapore	10.0	8.1	6.1	6.5	6.3	6.7	6.6	6.6	6.6	6.6
Taiwan	11.2	10.1	10.1	10.6	11.0	10.8	10.7	10.3	10.7	10.9
Thailand	9.5	9.9	10.2	10.1	10.1	10.8	10.8	13.1	15.4	15.0
United States	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5

Sources: China, State Statistical Bureau (various years), Hill (1988, 1991), Indonesia, Bank Indonesia (various years), Indonesia, BKPM (1993), International Monetary Fund (various years, 1995), Korean Foreign Trade Association (1992), Malaysia Industrial Development Authority (various years), Malaysia, Ministry of Finance (various years), Pangestu (1991), Philippines, Central Bank of the Philippines (various years), Republic of China, Central Bank of China (various issues), Republic of China, Investment Commission (1993, various years), Samudram (1995), Singapore, Department of Statistics (1993a, 1994), Thailand, Bank of Thailand (various years), U.S. Department of Commerce (1990, 1994), Zhang (1993).

Notes: In principle, estimates are obtained by first calculating total FDI flows and stocks, where stocks are defined as cumulative flows from 1970 forward. Second, Hong Kong shares are multiplied by these totals to obtain a proxy for FDI from Hong Kong that is in principle consistent with balance-of-payments estimates. Note, however, that calculation methods differ significantly among host economies. Contact the authors for more details.

business involvement in these Southeast Asian economies. In more recent years, Hong Kong has also been a springboard for investment by foreign-controlled companies in Southeast Asia as well as in China. One indication of this is the fact that a large number of firms have chosen Hong Kong as headquarters for their Asian operations.[8] A more concrete indication of the extent to which Hong Kong's FDI in Southeast Asia is indirect FDI can be obtained

8. According to a small-scale survey by the Industry Department in 1985, 163 of 470 affiliates of foreign multinationals in Hong Kong were operational headquarters in charge of the Asian region. An enlarged survey in 1990 found that 572 of 2,310 affiliates were operational headquarters, with half of the operational headquarters being affiliates of U.S. firms (Wilson 1992).

Table 4.3 Ratios of Selected Indicators for Hong Kong- and Singapore-Owned Establishments in Singapore's Manufacturing Sector Classified by Country of Ultimate Beneficial Owner to the Same Indicators Classified by Capital Source

Indicator	1980	1981	1982	1983	1984	1985	198(
Hong Kong–owned establishments							
Establishments	0.86	0.90	0.87	0.90	0.86	0.86	0.81
Employees	0.57	0.68	0.72	0.74	0.67	0.73	0.7[illegible]
Output	0.48	0.54	0.42	0.54	0.42	0.43	0.4[illegible]
Value added	0.49	0.58	0.51	0.62	0.53	0.53	0.54
Sales	0.49	0.56	0.42	0.53	0.42	0.44	0.41
Exports	0.42	0.52	0.37	0.45	0.31	0.37	0.38
Fixed investment	0.39	0.46	0.56	0.52	0.36	0.16	0.3[illegible]
Singapore-owned establishments							
Establishments	1.05	1.05	1.05	0.99	0.98	0.98	0.98
Employees	1.12	1.12	1.10	0.97	0.96	0.96	0.9[illegible]
Output	0.93	0.77	0.73	0.67	0.72	0.72	0.7[illegible]
Value added	1.07	1.04	1.02	0.90	0.86	0.91	0.81
Sales	0.94	0.77	0.73	0.68	0.72	0.72	0.7[illegible]
Exports	1.00	0.64	0.61	0.53	0.58	0.62	0.6[illegible]
Fixed investment	1.09	1.07	1.04	0.96	0.90	0.94	0.84

Sources: Singapore, Department of Statistics (various years); Singapore, Economic Development Boar((1994).

Note: Original indicators are in number of establishments, number of employees, and millions of Singa pore dollars.

from Singapore's Census of Industrial Production for 1980–86. Comparisons indicate that classification by country of ultimate beneficial owner reduces the estimates of the importance of Hong Kong–owned establishments in Singaporean manufacturing significantly (table 4.3). Reductions of shares are relatively small in terms of the number of firms or employment but much larger in terms of output, sales, value added, exports, or investment, with estimates often being cut in half or even more. In addition, Hill (1988) indicates that British companies based in Hong Kong account for a large portion of Hong Kong's FDI in Indonesia, while firm-level data from Toyo Keizai (1994) show that a number of Japanese investments are routed through Hong Kong–based affiliates.[9] In contrast to these examples, Hong Kong's FDI position in the United States was larger, often much larger, when classified by country of ultimate beneficial owner in 1989–92, though this was reversed in 1993.[10] Thus, although the available data are limited, there is a clear indication that classifying

9. See subsection 4.4.2 for examples of indirect investment in Thailand. Casual thumbing through the Toyo Keizai surveys indicates substantial indirect investment in China and other Southeast Asian economies as well.

10. The ratio of Hong Kong's FDI position (stocks) classified by ultimate beneficial owner to the FDI position classified by country of each member of the parent group was 3.6 in 1989, 1.5 in 1990, 1.1 in 1991, 1.4 in 1992, and 0.8 in 1993 (U.S. Department of Commerce 1994).

Hong Kong's FDI by country of ultimate beneficial owner greatly reduces such FDI, especially in Asia.

4.3.2 Singapore

The data on outward FDI for Singapore are much more comprehensive than those for Hong Kong and are consistent in suggesting that much of the outward FDI from this economy is also from foreign-controlled firms. The share of foreign-controlled companies in total FDI stocks fell from 48 percent in 1981 to a low of 26 percent in 1985 and then increased to a peak of 58 percent in 1989, before it fell back to 51 percent in 1991 (table 4.4). The large increase in this share in the late 1980s came as a result of increased investment by wholly foreign-owned firms, whose share of the total grew from 17–25 percent in 1981–88 to 45 percent in 1989.

Another similarity with Hong Kong is that neighboring Asian economies have received the bulk of outward FDI from Singapore. Malaysia is by far the largest recipient of Singapore's FDI, accounting for 60 percent of these FDI stocks in 1981, 50 percent in 1984, and 23 percent in 1991 (table 4.4). Hong Kong has been the second largest destination of Singapore's FDI, its share of the total rising from 11 percent in 1981 to 20 percent in 1985 before falling off to 12 percent in 1991. Australia has traditionally been the third largest destination with shares of 4 to 8 percent, while the United States has seen its share rise from 2–3 percent through 1987 to 4–6 percent since. Shares for the Netherlands and New Zealand have also increased rapidly in recent years, reaching double-digit levels in some years. No other individual economy had shares of more than 3 percent.

Despite these similarities, there are also some conspicuous contrasts between Hong Kong and Singapore related to outward FDI. For example, although most outward FDI by locally controlled firms comes from the private sector in Hong Kong, government-linked companies dominate outward FDI by locally controlled firms in Singapore (Singapore, Economic Development Board 1993). Another difference is the relatively conspicuous role the government plays in Singapore's economy, in particular, the government's active promotion of the development of corporate regionalization strategies and outward FDI in recent years.

The breakdown by country of FDI by foreign-controlled companies reveals relatively small shares for Asian economies, 40 percent in 1991, compared to a similar breakdown of FDI by local companies, 61 percent (table 4.5). For foreign-controlled companies, shares of Malaysia (18 percent) and Hong Kong (8 percent) are notably low compared to corresponding shares for local companies (28 and 17 percent, respectively). Indeed, the only listed Asian economies for which shares are higher in foreign-controlled companies are Japan (1.6 vs. 0.2 percent) and Thailand (4.0 vs. 2.6 percent); however, for the other Asia category, the differential is even larger (4.9 vs. 1.0 percent). For Europe and the United States also, shares tend to be larger in local-controlled firms (17

Table 4.4 **Singapore's Direct Investment Stocks Abroad by Ownership of Investing Firm and C**

Variable	1981	1982	1983	1984	1985	1986	19
Total outward FDI stocks[a]							
Cumulative flows (IMF)	1,177	1,829	1,933	2,129	2,653	3,047	3,4
Outward FDI stocks (DOS)	1,678	2,087	2,233	2,399	2,257	2,598	2,9
Outward FDI stocks by ownership of investing firm[b]							
Foreign-controlled firms	799	988	1,007	1,004	585	744	1,1
Wholly foreign	293	380	526	552	384	547	7
Majority foreign	507	608	481	452	201	198	3
Local-controlled firms	878	1,099	1,226	1,395	1,672	1,854	1,8
Majority local	298	303	350	329	710	742	7
Wholly local	580	796	876	1,067	962	1,111	1,0
Outward FDI stocks of all investors by host economy[b]							
Asia	1,290	1,587	1,662	1,805	1,721	1,837	1,9
Brunei	4	6	9	49	53	50	
China	0	0	0	0	58	94	1
Hong Kong	182	317	357	391	461	498	5
Indonesia	40	40	44	56	65	68	
Japan	0	0	1	1	5	6	
Malaysia	1,007	1,162	1,163	1,209	972	986	1,0

Philippines	18	16	18	18	22	23	
Taiwan	13	15	25	27	33	38	
Thailand	10	10	8	9	21	30	
Other Asia	16	21	38	45	32	45	
Europe	51	58	58	72	89	167	3
Netherlands	1	1	12	11	12	14	1
United Kingdom	50	57	43	44	46	82	
Other Europe	0	0	2	17	31	72	1
Other regions	337	442	513	523	447	594	6
Australia	63	91	121	132	177	176	2
New Zealand	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n
United States	32	44	48	54	66	65	
Other countries	243	307	333	325	186	335	3

Note: Figures are in millions of Singapore dollars.

[a]From International Monetary Fund (1995, various years).

[b]From Singapore, Department of Statistics (1991, 1993a, 1993b, 1993c).

Table 4.5 **Singapore's Direct Investment Stocks Abroad by Capital Source, Country, and Indus**

Variable	All Industries	Manufacturing	Construction	Commerce	Transport
Outward FDI stocks of foreign-controlled companies by host economy					
All countries	4,370	705	12	367	48
Asia	1,742	640	3	330	16
Brunei	6	0	0	6	0
China	27	22	0	6	0
Hong Kong	341	18	0	19	0
Indonesia	46	24	2	3	0
Japan	68	16	0	1	1
Malaysia	793	312	0	238	14
Philippines	28	14	0	4	0
Taiwan	43	7	0	27	0
Thailand	175	134	0	5	1
Other Asia	214	94	0	21	0
Europe	122	25	0	15	4
Netherlands	−57	9	0	0	0
United Kingdom	113	1	0	14	1
Other Europe	65	15	0	1	3
Other regions	2,507	41	9	22	28
Australia	214	30	7	9	2
New Zealand	818	4	0	7	0
United States	157	6	0	2	3
Other countries	1,318	1	2	3	23

Outward FDI stocks of local companies by host economy									
All countries	4,181	1,019	69	609	94	1,921	272	101	95
Asia	2,551	864	40	561	80	621	235	69	81
Brunei	47	1	7	3	0	37	0	0	0
China	125	73	0	27	19	2	0	4	1
Hong Kong	716	226	7	81	15	262	103	20	2
Indonesia	129	32	11	0	29	44	6	0	6
Japan	9	0	0	6	3	0	0	0	0
Malaysia	1,164	427	9	298	6	231	113	13	67
Philippines	34	13	0	0	0	16	0	0	4
Taiwan	179	46	3	108	0	20	0	1	0
Thailand	109	19	2	39	3	8	7	31	1
Other Asia	40	27	0	0	5	0	6	1	0
Europe	719	28	29	3	2	641	0	3	13
Netherlands	584	0	0	0	0	582	0	2	0
United Kingdom	83	8	0	1	2	59	0	1	13
Other Europe	52	20	29	2	1	0	0	1	0
Other regions	911	127	0	46	11	659	37	30	1
Australia	219	18	0	34	2	155	9	0	1
New Zealand	115	0	0	0	3	93	0	19	0
United States	256	92	0	10	2	122	21	10	0
Other countries	320	18	0	1	5	289	7	1	0

Source: Singapore, Department of Statistics (1993b).

Note: Figures are in millions of Singapore dollars.

and 6 percent, respectively) than in foreign-controlled firms (3 and 4 percent, respectively). On the other hand, the substantial recent investments in New Zealand and in the other country category appear to have come primarily from foreign-controlled firms.

Contrary to the popular impression that local manufacturing firms facing high labor costs have been the major investors abroad, Singapore's outward FDI is dominated by investments in financial services, with this activity accounting for 60 percent of the FDI stocks of foreign-controlled firms and 48 percent of the FDI stocks of local firms (table 4.5). For foreign-controlled firms, the largest shares of these financial service investments are in other countries (46 percent) and New Zealand (31 percent), followed distantly by Malaysia (7 percent) and Hong Kong (7 percent). For local firms, the largest shares are in the Netherlands (30 percent), other countries (15 percent), Hong Kong (14 percent), and Malaysia (12 percent). Shares of Australia, New Zealand, and the United States are also relatively large at 5 to 8 percent. Thus, both foreign-controlled and local firms have apparently undertaken somewhat similar patterns of investment in that financial service investments in developed economies, Malaysia, Hong Kong, and other countries are a significant element of both types of investment.[11]

Investment patterns of the two groups of investors are also similar in that manufacturing is the second largest sector of investment, accounting for 16 percent of the FDI by foreign-controlled firms and 24 percent of the FDI by local firms (table 4.5).[12] For both foreign-controlled and local firms, the vast majority of such investments are concentrated in Asia, 91 and 85 percent, respectively. For foreign-controlled firms, Malaysia (44 percent), Thailand (19 percent), and other Asia (13 percent) are by far the dominant destinations of such investments, with shares in other Asian countries being much smaller (4 percent or less). The pattern for local firms is similar in that Malaysia is the largest destination (42 percent) but differs in that it is much more diversified with notably larger shares in Hong Kong (22 percent), China (7 percent), and Taiwan (5 percent) but lower shares in Thailand and other Asia (2 to 3 percent). These differences suggest that a relatively large amount of investment by local firms in manufacturing seeks to exploit the so-called Chinese connection, while a relatively large amount of FDI by foreign-controlled firms seeks to

11. We speculate that the large investments in other countries are concentrated in tax havens such as the Bahamas, the Cayman Islands, and the Netherlands Antilles, though we have no concrete evidence of this.

12. Note also the correlation between the data in table 4.4, which indicate that foreign-controlled firms accounted for 41 percent of Singapore's manufacturing FDI in 1991, and the data in table 4.3, which suggest that classification by country of ultimate beneficial owner reduces the scope of activities by Singapore-owned establishments for many years in the 1980–86 period, with exports, sales, and output being the activities most affected. Although these two data sources are not consistent in that the latter sample includes a large number of local establishments that do not invest abroad, they are consistent in suggesting that a large portion of manufacturing activity that would be considered Singaporean if country of capital source were the basis for classification would not be Singaporean if country of ultimate beneficial owner were the basis of classification.

expand operations in neighboring Southeast Asian economies, especially Thailand.[13]

Among the remaining industries listed in table 4.5, commerce (8 percent of the total), business services (7 percent), and real estate (6 percent) were the only industries with shares of total FDI stocks exceeding 1 percent for foreign-controlled firms. Among these investments, commerce investments in Malaysia, business service investments in Japan and the United States (and to a lesser extent Hong Kong and Thailand), and real estate investments in Australia and Hong Kong are conspicuous. For local companies, construction (15 percent) and real estate (6 percent) were the only industries with shares of total FDI stocks greater than 2 percent. Here construction investments are concentrated in other Europe (43 percent) and four Asian economies (Brunei, 10 percent; Hong Kong, 10 percent; Indonesia, 16 percent; and Malaysia, 13 percent). Thus, outside of the main sectors of investment (finance and manufacturing), differences in the patterns of outward FDI by foreign-controlled firms and local firms are relatively pronounced.

Although revealing, the above estimates of FDI stocks do not cover investments by primarily local individuals, sole proprietors, and partnerships. Another survey was carried out by the Singapore Manufacturers' Association between February and March 1993. Of its 323 respondents, half were small to medium-size firms.[14] The survey confirmed Malaysia as the traditional favorite spot for Singapore investors, with 34 percent of the respondents reporting that they had operations in that economy. Relatively large shares of the respondents also reported having affiliates in Indonesia (16 percent), China (11 percent), and Thailand (10 percent), but no other economy had over 5 percent of the respondents reporting investments. Thus these data also suggest that the geographical orientation of local investors venturing abroad is different from that of foreign-controlled firms.

4.4 Characteristics of Hong Kong's and Singapore's Outward Investors

The data in section 4.3 indicate that ownership-based estimates of outward FDI from Hong Kong and Singapore would be far smaller than geography-based estimates. The large differences in geography-based and ownership-based classifications, combined with the often complex nature of outward FDI by foreign-controlled firms in these economies, suggests that a closer examination of the criteria underlying these different classifications is warranted. In this context, we are primarily concerned with the issue of control of investment decisions in foreign-controlled firms undertaking outward investment from

13. One of the authors has personally encountered several examples of investment in Thailand through affiliates in Singapore and Malaysia during a recent survey of intrafirm trade and networking in multinationals operating in Thailand.

14. The results of this survey are quoted from the *Straits Times*, 30 April 1993.

these two economies. Parallel to the discussion in section 4.2 above, concern with control stems from recognition that control-related issues underlie many of the arguments in favor of using ownership-based classifications, combined with recognition that evaluation of the origin of control of investment decisions as well as evaluation of the implications of the origin of that control is sometimes extremely complex in these firms.

To examine these issues more closely, we have assembled survey information on foreign-controlled investors in Hong Kong with the aim of ascertaining just how management decisions, including decisions to invest, are made in the surveyed firms.[15] In addition, we have generated a rather comprehensive list of investors from Hong Kong and Singapore in Thailand that makes some more general evaluations of the two groups of investors possible.

4.4.1 Outward Investors from Hong Kong

Table 4.6 presents a synopsis of 20 case studies of foreign-controlled firms that have undertaken outward investment from Hong Kong.[16] These companies reflect a diverse mix of organizational approaches to multinational operations by the ultimate foreign parent firms through their regional headquarters based in Hong Kong. The case-study firms tend to be relatively old, with only three established after 1985 and nine in the 1970s or earlier. By industry, four firms are primarily involved in manufacturing, six in trade or distribution, one in finance, six in other services, and three in a combination of manufacturing, trade, and service operations. All but one of the 20 firms have affiliates in Singapore; about half of the firms have affiliates in Malaysia (11 firms), Indonesia (9 firms), and Thailand (9 firms); and one-fifth of the firms have affiliates in the Philippines.

In order to highlight some basic characteristics of these firms, the ASEAN affiliates of the 20 foreign-owned firms are classified by degree of autonomy of the Hong Kong–based investor as well as by source of finance and method of control used for operations in the ASEAN affiliates (table 4.7). Perhaps of most interest in this context is that the majority of these affiliates (30/56 or 26/42) are controlled by relatively autonomous Hong Kong firms. If one looks at the sample of 56 affiliates for which information on the source of finance could be obtained, the vast majority (80 percent) are seen to rely primarily on finance through the internal capital reserves of the foreign-controlled firms (regional headquarters) based in Hong Kong. Furthermore, reliance on this source of finance is even more pronounced in affiliates of relatively autonomous firms (90 percent) compared to parent-controlled firms (69 percent). Hong Kong

15. Originally, we had hoped to have parallel coverage of investors from Hong Kong and Singapore, but difficulties in obtaining interviews with Singapore-based firms have precluded this.

16. These cases are abstracted from a larger project in which one of the authors has interviewed more than 110 headquarters firms in Hong Kong and another 60 odd subsidiaries or affiliates in Indonesia, Malaysia, Singapore, and Thailand. For confidentiality reasons, company names are not revealed.

Table 4.6 Characteristics of Case-Study Foreign-Owned Firms in Hong Kong

Company	Year Established	Main Business	Country of Ultimate Parent Firm	Country of ASEAN Operation[a]
A	1975	Electronic manufacturing	Netherlands	S
B	n.a.	Solder chemical manufacturing	United States	S
C	1983	Computer software solutions	United States, Thailand	I, M, S, T
D	1980	Electronic components, distributor	United States	M, S
E	n.a.	Power supplies, distributor	United States	S
F	1971	General insurance	Netherlands, United Kingdom	I, M, P, S, T
G	1987	Distribution, testing services	United Kingdom	M, S, P, T
H	1972	Travel services	Australia	S, T
I	1975	Pharmaceuticals manufacturing and trade	Sweden	I, M, S, T
J	1964	Market research	United States	I, M, P, S, T
K	1983	Software distribution	United Kingdom	M, S
L	1990	Software distribution	United States	S
M	1836	General insurance	United States	S
N	1984	Lead frame manufacturing	Germany, Netherlands	M, S
O	1965	General insuarnce	Indonesia	I
P	1959	Furniture manufacturing	United States	I, M, S, T
Q	1981	Merchant banking	United Kingdom	I, M, S, T
R	1977	Chemical products, transportation	Singapore	I, M, S, T
S	1989	Electronic components trading	Singapore	S
T	1981	Department store trading, sourcing	Belgium	I, S, P, T

Source: Field interviews by Henry Yeung.
[a]I = Indonesia, M = Malaysia, P = Philippines, S = Singapore, and T = Thailand.

capital markets and the ultimate parent companies were the second and third most frequently used sources of finance for affiliates of parent-controlled firms, but these sources were not used at all by the affiliates of autonomous firms. This limited sample thus suggests somewhat different financial strategies in the two groups of firms.

A second variable examined here is the method of controlling the ASEAN affiliates used by the Hong Kong–based, foreign-owned firms (table 4.7). Most of the 42 affiliates in this sample were controlled by the Hong Kong headquarters in one of three ways: cost control (26 percent), periodic reports to headquarters (24 percent), and periodic inspections by top executives from headquarters (14 percent). Autonomous firms tend to rely more on these methods, especially reports to headquarters, than do controlled firms, though the ranking

Table 4.7 Source of Finance, Method of Control, and Extent of Ultimate Control for ASEAN Subsidiaries of a Sample of Foreign-Owned Firms in Hong Kong

Source of Finance or Method of Control	Controlled	Autonomous	Total
Source of finance (number of firms)	26	30	56
Regional headquarters, Hong Kong	18	27	45
Capital market, Hong Kong	4	0	4
Family reserve, Hong Kong	0	1	1
Host-country partners	1	2	3
Ultimate parent company	3	0	3
Source of finance (% of firms)	100.00	100.00	100.00
Regional headquarters, Hong Kong	69.23	90.00	80.36
Capital market, Hong Kong	15.38	0.00	7.14
Family reserve, Hong Kong	0.00	3.33	1.79
Host-country partners	3.85	6.67	5.36
Ultimate parent company	11.54	0.00	5.36
Method of control (number of firms)	16	26	42
Production, market planning from headquarters	2	1	3
Inventory, quality control by headquarters	0	2	2
Cost control by headquarters	4	7	11
Broad guidelines from corporate groups	0	1	1
Centralized decision making from headquarters	1	2	3
Inspections by top management from headquarters	2	4	6
Reports from local managers to headquarters	3	7	10
Sourcing information from headquarters	0	1	1
No specific ways	1	0	1
Mutual exchange of information	2	1	3
Annual meetings	1	0	1
Method of control (% of firms)	100.00	100.00	100.00
Production, market planning from headquarters	12.50	3.85	7.14
Inventory, quality control by headquarters	0.00	7.69	4.76
Cost control by headquarters	25.00	26.92	26.19
Broad guidelines from corporate groups	0.00	3.85	2.38
Centralized decision making from headquarters	6.25	7.69	7.14
Inspections by top management from headquarters	12.50	15.38	14.29
Reports from local managers to headquarters	18.75	26.92	23.81
Sourcing information from headquarters	0.00	3.85	2.38
No specific ways	6.25	0.00	2.38
Mutual exchange of information	12.50	3.85	7.14
Annual meetings	6.25	0.00	2.38

Source: Field interviews by Henry Yeung.

of these methods is markedly similar in both groups. Among other methods, reliance on inventory and quality control, guidelines from corporate groups, and information sourcing are observed in a few affiliates of autonomous firms but not in controlled firm groups. On the other hand, affiliates of controlled firms use production and market planning, mutual exchange of information, and annual meetings more than do autonomous firm groups. Thus, to a certain extent, there is a regional division of control in which ASEAN subsidiaries report to regional headquarters based in Hong Kong rather than directly to their ultimate parent companies.

Among foreign-owned firms in Hong Kong that have been given substantial autonomy in running the group's operations in the Asia Pacific region, four broad types are observed in this sample: recently acquired firms, firms with strong local entrepreneurial involvement, customer-oriented firms, and relocated holding companies. This typology is based on the limited sample used here and is by no means exhaustive. Moreover, there are overlaps in organizational structures among the different types of firms. The examples below illustrate how these four types of firms have come to have a good deal of control over their operations, including investment decisions.

The sample contains two autonomous firms that were recently acquired by ultimate foreign parent companies, companies D and J. As has been explained by previous researchers (e.g., Dicken, Forsgren, and Malmberg 1994) these kinds of firms often do not experience much change in their internal operating systems because their management structures tend to be embedded, and these two firms generally fit this pattern. Company D was first established in Hong Kong in early 1980 (table 4.6), but it was acquired as a wholly owned subsidiary by its American ultimate parent company in August 1993. Even after the takeover the firm has continued to be run by its present ethnic Chinese president who continues to make decisions for the parent firm's operations in Asia. The company is now owned by a holding company registered in the British Virgin Islands, which is, in turn, wholly owned by the U.S. parent and owns 100 percent of the firm's operations in Hong Kong, China (Beijing, Shanghai, and Shenzhen), Korea, Singapore, and Malaysia.

Company J has been a market leader in the field of market research in Asia, with offices spanning the entire Asia Pacific region (Australia, Canada, China, Indonesia, Japan, Korea, Malaysia, New Zealand, the Philippines, Singapore, Taiwan, Thailand, the United States, and Vietnam). Ever since its establishment in 1964, the firm has been a multinational, with operations in several countries and employees of several nationalities. In the early 1980s, the firm merged with a British research company that owned 30 percent of the firm until the management of the company bought itself out in the late 1980s. After a period as an employee-owned firm, it then merged with the largest U.S. research firm of its type in early 1994. The first merger did not bring significant changes to the group's corporate structure, which was characterized by a large degree of decentralization. However, since the merger with the U.S. firm, the

firm's Hong Kong–based executive committee has tried to exert more influence over the firm's foreign affiliates.

Firms with strong local entrepreneurial involvement can exercise significant control over their foreign investment activities, despite being foreign owned, as illustrated by two of the cases considered here, companies N and P. Company N is a joint venture between a Hong Kong (ethnic Chinese) entrepreneur (40 percent shareholding) and a large German conglomerate (60 percent shareholding) in which the Hong Kong entrepreneur is an expert in the plating industry. The firm is also the regional headquarters for the Far East and is currently in charge of operations in Singapore and Malaysia. Corresponding to the ownership structure of the Hong Kong company, operations in Singapore and Malaysia are both 60–40 joint ventures between the holding company in Germany and the Hong Kong entrepreneur, who is also the managing director for all three Asian firms. The Hong Kong office, as the regional headquarters, has the autonomy to make most of its own operational, marketing, and investment decisions provided it follows the general guidelines laid down by the German head office and reports strategic changes in operations. Daily operations of plants in Singapore and Malaysia are financed by the regional headquarters based in Hong Kong and are managed by top executives sent from Hong Kong who are encouraged to develop their own markets. The relative autonomy given to subsidiaries is due to the German parent's decentralization policy, whereby parent control is only exercised in financial areas such as budgeting, borrowing from banks, and distribution of profits, and is also reflected in the ownership structure of the parent itself, which has been turned into a trustee holding company and is governed by an executive board of directors.

Company P is a wholly owned subsidiary of probably the world's largest home furnishing company based in the United States, and as in company N, Hong Kong is the financial and administrative center for manufacturing operations worldwide. Knockdown furniture components are manufactured in the Far East, and final assembly of these components is completed by related firms in the United States and European countries. The majority of sales by manufacturing plants in the Far East is thus intrafirm trade. Experienced supervisors from existing plants in ASEAN countries are transferred to help set up new plants in the region as they are initiated. Regional management control is in Singapore, where the chief executive officer (CEO) and the chairman (both former Hong Kong Chinese) are based. All financial matters in ASEAN subsidiaries must be reported to and controlled by the CEO who reports to the U.S. parent at annual meetings. The Hong Kong office thus exercises control over the accounting of financial matters, while the CEO in Singapore controls investment decisions and the ultimate source of capital is usually the firm's registered holding company in the British Virgin Islands. Hong Kong has been chosen as the operational headquarters mainly for tax purposes and for its accessibility.

The two customer-oriented firms in the sample, companies C and T, tend to

exercise their control in a slightly different way. Namely, because frequent contacts with key clients at the highest possible level are required, top-level executives are often sent from the ultimate parent companies to Hong Kong and given authority to make in situ investment decisions, though this does not necessarily mean that investment capital comes from regional headquarters based in Hong Kong. Company T, for example, is wholly owned by its Belgian parent and is one of more than 40 offices and subsidiaries worldwide, mainly in the form of wholly owned subsidiaries. It specializes in apparel sourcing, primarily for major garment companies (90 percent of its business) and also for department stores. The Hong Kong office is the regional headquarters for the Far East and controls all subsidiaries throughout the Asia Pacific region, which must report to the regional headquarters, though these subsidiaries make many decisions independently. There are four offices in the ASEAN region and eighteen throughout the rest of Asia. The regional headquarters in Hong Kong has been given complete control over operations within Asia, and according to the Belgian managing director in Hong Kong, there is no interference with decision-making processes from the parent.

Company C is a multiparty joint venture among IBM Hong Kong/China (25 percent, financed through IBM Hong Kong/China based in Hong Kong), a New Zealander managing director and chairman (37.5 percent), and a Thai banker (37.5 percent). Neither IBM nor the Thai banker are involved in day-to-day operations. The group controlled by the Hong Kong firm is now one of the largest computer software companies in Asia. It prefers to establish joint ventures when investing in the ASEAN region, the exception being in Singapore, where there is a wholly owned affiliate. In these joint ventures, the firm seeks out reputable local businessmen or companies as partners to strengthen its competitive advantages in host-economy markets. Management control is primarily exercised by the managing director/chairman in Hong Kong, though local general managers are put in charge of day-to-day operations. Because joint ventures are preferred, the sources of investment in ASEAN affiliates are often economies other than Hong Kong, with differences among joint ventures depending on the host country and the partner initiating the investment. For example, in Thailand, although ownership of the Thai office is shared among the three parties, it is controlled by the local general manager and is financed from Thailand instead of Hong Kong. In contrast, the establishment of the Malaysian firm was initiated by IBM in order to facilitate support of IBM mainframe systems.

There are two firms in the sample, companies G and Q, that can be classified as relocated holding companies. As companies have tried to grapple with the uncertainties surrounding the return of Hong Kong to China in 1997, many have chosen to relocate their holding companies abroad, often to tax havens such as Bermuda, the British Virgin Islands, and Panama, or in the case of multinationals that had migrated to Hong Kong from other economies, back to the original home economy (primarily the United Kingdom). The two ex-

amples considered here fall into the category of firms that were originally British, then incorporated in Hong Kong, but have since moved their headquarters back to the United Kingdom. However, both firms have maintained their Hong Kong operations at more or less the same level since the relocation.

Company G is a regional subsidiary of its international ultimate parent company, which, as an international service and marketing group, operates in over 80 countries worldwide and employs some 48,000 people. The firm has a long history in Asia and other international markets, with some of its businesses dating back more than 150 years. In a period of three to six years, the group had carried out what they called "business streaming" on a worldwide basis. As a result of this business streaming, all overseas affiliates have to report to a headquarters of that stream, usually based in London. Within this organizational structure, the Hong Kong firm is responsible for the group's operations in Hong Kong, China, Taiwan, Macau, the Philippines, Vietnam, Cambodia, and Laos, focusing on three core businesses, distribution of motors, marketing of premier consumer goods, and international services (insurance, shipping, testing, and buying). The firm and its affiliates in China and Taiwan apparently have control of most daily matters but are often referred to the London parent on strategic matters, including most investment decisions. The Hong Kong firm is the international head office for the group's global buying service operation and controls the sourcing of apparel and general merchandise from developing and newly developed countries for major department stores and other buyers, primarily in the United States, Europe, and Australasia. Another of the Hong Kong firm's functions is as regional headquarters for the group's testing services in the Asia Pacific region. All major decisions in ASEAN subsidiaries are reported to the Hong Kong firm and frequently reported to the London parent, but the Hong Kong firm has large influence on actual decisions as its familiarity with regional issues is valued highly by the parent.

Company Q is the merchant banking arm of a large British bank formerly incorporated in Hong Kong that has transferred its holding company back to London. The Hong Kong firm is the regional headquarters for the Asia Pacific region and is seeking to become the market leader in merchant and investment banking with strong financial support from the holding company. Although the Hong Kong firm and its Asian operations are wholly owned by the holding company in London, it is run rather independently. Key investment decisions are made at board meetings usually held in Hong Kong. The parent is represented at board meetings, and directors can raise questions on investment proposals. Outside of these meetings, however, the parent exercises little control over how these investment proposals are executed. One reason is that the holding company is much more concerned with the commercial banking arm of the group. Investment projects are financed from various sources in Hong Kong or local capital markets. It appears that ownership has very little relation to outward direct investments and control of these investments. The Malaysian of-

fice, for example, is managed autonomously, with the Malaysian director reporting to the CEO in the Hong Kong firm as well as the CEO in the bank's Malaysian branch.

These case studies thus indicate that there is often a high degree of autonomy exercised by foreign-owned Hong Kong firms investing in Southeast Asia, and it is evident that several foreign-owned companies are using Hong Kong not only as a "stepping stone" to penetrate the lucrative and emerging Asian markets but also as a regional center of decision making and control in its own right. This might suggest that the geography of ownership often does not correspond to the geography of control. On the other hand, even among the relatively autonomous firms, there are a number of examples where autonomy is a result of a conscious decentralization strategy by the parent firm. In other words, the very lack of a correlation of the geography of ownership and the geography of control may be dictated by the parent firm.

4.4.2 Investors from Hong Kong and Singapore in Thailand

There are a number of published corporate directories in Thailand that have made it possible to classify 95 Thai affiliates of Hong Kong and Singapore investors by whether the Hong Kong or Singapore investor can be identified as foreign controlled or not (see table 4.8 for some summary statistics; the firm list on which other observations are based is available from the authors). It should be noted that a few of the firms not identified as foreign controlled are probably foreign controlled but it simply has not been possible to identify them as such. On the other hand, we are reasonably sure that all the affiliates identified as foreign controlled (the results of indirect investment) are indeed ultimately owned by a firm or individual that is not from Hong Kong or Singapore.

The most conspicuous pattern observed from these data is that 59 percent of the affiliates of Hong Kong firms and 64 percent of the affiliates of Singapore firms are actually controlled by investors outside of Hong Kong and Singapore. This finding is consistent with the data presented in section 4.3 that suggested a large portion of the FDI from Hong Kong and Singapore is of the indirect variety.[17] These data also suggest that, in terms of the number of investors at least, the shares of indirect investment are similar in Hong Kong and Singapore. If measured in terms of sales, however, the shares are somewhat different, with 18 foreign-controlled affiliates accounting for 68 percent of the sales of the 33 Hong Kong affiliates for which sales data were available, but 29 foreign-controlled affiliates accounting for only 50 percent of the sales of the 50 Singapore affiliates for which data were available.

Also, as indicated by the numbers in section 4.3 and the Hong Kong case

17. Because the sample is biased toward large investors and investors from Japan, it is likely to overstate the relative importance of indirect investors. At the same time, however, the sample is reasonably comprehensive, and this bias is not likely to be large.

Table 4.8 A Sample of Thai Affiliates of Firms Based in Hong Kong and Singapore

	Industry				Major Foreign Country						Ownership Shares					
Measure	Manuf.	Trade	Trade plus Manuf. or Other	Other	Hong Kong	Singapore	Japan	Other OECD	Other Countries	Unknown	Hong Kong or Singapore	Foreign Total	Local	Year of Start-Up	1991 Employment[a]	1991 Sales[b]
Affiliates of foreign-controlled Hong Kong firms																
Number in sample	2	5	7	8	0	0	16	4	2	0	22	22	22	22	20	18
Mean											34.0	49.6	4.4	1980	465	28.378
Sample standard deviation											19.3	16.8	11.3	8	949	36.011
Affiliates of Hong Kong firms not known to be foreign controlled																
Number in sample	7	7	0	1	4	0	0	1	1	9	15	15	15	15	6	15
Mean											44.2	46.7	0.0	1983	1,092	15.743
Sample standard deviation											18.1	16.5	0.0	8	1,218	10.058

Affiliates of foreign-controlled Singapore firms											
Number in sample	6	10	12	9	1	0	30	6	0	0	3
Mean											3
Sample standard deviation											2
Affiliates of Singapore firms not known to be foreign controlled											
Number in sample	5	12	1	3	0	9	0	0	0	12	2
Mean											3
Sample standard deviation											2

Sources: Data taken from published lists of firms operating in Thailand; primary sources are International Business Research (Thai
Business Information and Research (1993), and Toyo Keizai (1992, 1993). The former two publications cover most large and me
with sales of U.S.$4 million or more are included in one of these lists. The third source covers so-called supporting industries a
Japanese firms. Hence the sample is biased toward large firms and firms with ultimate parents in Japan. In addition to these primar
a number of secondary sources, namely, Datapool (1993), American Chamber of Commerce in Thailand (1992), and Thai-Ca
supplemental information on ultimate parents.

[a]Number of employees.

[b]In millions of U.S. dollars.

studies above, these investments are in a wide range of activities. By industry, the largest number of firms were in trade (36 percent) and another large group combined trade with manufacturing (19 percent) or other activities (2 percent). The remaining sample firms were evenly divided between manufacturing (21 percent) and other activities (22 percent), primarily services. If one compares foreign-controlled investors and investors not known to be foreign controlled, the shares of trade combined with other activities and other industries are larger for foreign-controlled investors than for investors not known to be foreign controlled, while the reverse is true in manufacturing and trade alone, for both Hong Kong and Singapore investors.[18] In contrast, the differences between investors by country are less consistent, suggesting that distinguishing the level of foreign control may be more important for understanding investment patterns than distinguishing the geographical source of investment.

Another interesting characteristic is that affiliates of Hong Kong and Singapore firms are rarely characterized by high foreign ownership shares, with only 13 percent of the sample firms having total foreign ownership shares of 90 percent or greater and 29 percent with shares of 50 percent or greater. Low foreign ownership shares are due in part to Thai policies that restrict foreign equity shares in a number of activities, but there are many ways around these equity restrictions, and the sources used to construct table 4.8 suggest that high foreign ownership shares are generally more common among foreign affiliates in Thailand.[19] In this sample, there is also a tendency for total foreign ownership shares to be larger in affiliates of foreign-owned investors, with the differences being largest in the Singaporean case.

However, when comparing affiliates of foreign-owned investors and other affiliates, the more pervasive difference is the relatively large gap between total foreign ownership shares and Hong Kong/Singapore investor ownership shares in the case of affiliates of foreign-owned investors. In other words, indirect investment from Hong Kong or Singapore is often accompanied by investment from other foreign firms, most often those in the investing firm group. This pattern is especially common among Japanese investors in this sample. A related pattern of some significance in this case is the tendency for many Japanese affiliates to receive equity investment from other affiliates located in Thai-

18. Comparisons of shares for foreign-controlled firms vs. firms not known to be foreign controlled are as follows: in manufacturing only for Hong Kong affiliates, 2/22 vs. 7/15, for Singapore affiliates, 6/37 vs. 5/21; in trade only for Hong Kong affiliates, 5/22 vs. 7/15, for Singapore affiliates, 10/37 vs. 12/21; in trade and other activities (including manufacturing) for Hong Kong affiliates, 7/22 vs. 0/15, for Singapore affiliates, 12/37 vs. 1/21; and in other activities only for Hong Kong affiliates, 8/22 vs. 1/15, for Singapore affiliates, 9/37 vs. 3/21.

19. E.g., defining "foreign firms" as firms with 10 percent or more of their equity coming from foreign investors, 20 percent of 516 foreign firms listed in Advanced Research Group (1992) had ownership shares of 90 percent or greater and 29 percent had shares of 50 percent or greater. In a 791-firm sample from SEAMICO Business Information and Research (1993), these shares were 26 and 44 percent, respectively. Finally, of the 533 Japanese affiliates listed in Toyo Keizai (1993) that had their equity financed by Japanese parents only, these shares were 20 and 34 percent.

land.[20] The combination of investment from foreign affiliates and indirect investment through Thai affiliates is perhaps best understood as a way to secure ownership control in the presence of equity restrictions. On the other hand, the combination of indirect investment through Hong Kong and Singapore affiliates and investment from other foreign sources, usually Japanese parents, indicates that these Hong Kong and Singapore affiliates are acting as integrated parts of a worldwide network. Interviews with a few Japanese firms in Thailand that received equity investment from related firms in other Asian economies (mainly Hong Kong and Singapore, but also some from Malaysia) also indicated that this type of investment pattern is often the result of deliberate efforts by parent firms to spur regional integration and coordination among foreign affiliates.

Finally, there are clear differences between the Hong Kong and Singapore economies, notably the more dominant role of foreign multinationals (e.g., Ramstetter 1994) and the relatively small size of the local entrepreneurial class in Singapore (e.g., Lee and Low 1990), that might lead one to think that investment patterns from the two economies would differ greatly in a place like Thailand. However, this sample suggests that the patterns are quite similar in a number of respects.

4.5 Conclusions

This paper has surveyed information on outward investors from Hong Kong and Singapore with the aim of illuminating the implications of accounting for outward FDI by geographical source or by country of ultimate beneficial owner. By any measure it is clear that a very large portion of the FDI from these economies comes from foreign-controlled firms and hence that traditional, geography-based estimates of FDI from these economies greatly exceed corresponding ownership-based estimates. Examination of case studies from Hong Kong indicated a tendency for investment decisions to be relatively autonomous in four types of foreign-controlled Hong Kong firms: recently acquired firms, firms with strong local entrepreneurial involvement, customer-oriented firms, and relocated holding companies. On the other hand, evidence from some of these case studies and a sample of Thai affiliates of foreign-controlled Hong Kong or Singapore investors suggested that many of the investors were acting as parts of an integrated network of foreign investors, even when the foreign-controlled investor in Hong Kong and Singapore had a large degree of control over investment decisions. Moreover, if the Thai sample is representative, it does not appear that autonomous foreign-controlled investors constitute a majority among foreign-controlled investors in Hong Kong and Singapore.

20. Note that 38 percent (329) of the 872 Thai affiliates of Japanese firms listed in Toyo Keizai (1993) received equity investment from affiliates of Japanese investors located outside of Japan, including other affiliates located in Thailand.

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Comment Rachel McCulloch

The move from economic theory to empirical analysis always requires a leap of faith. Key concepts that shine out clearly in theoretical modeling rarely find

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neat counterparts in the data. In the case of foreign direct investment (FDI), the difficulty is not simply one of incomplete or inaccurate data, although this is often a formidable hurdle. The deeper problem arises because there is only a loose correspondence between conveniently measurable characteristics of firms and the economic phenomena to be investigated. Even data that are complete and accurate can leave much to be desired, and what are the "correct" data cannot always be specified in advance of the question to be answered using those data.

In their investigation of FDI from Hong Kong and Singapore, Low, Ramstetter, and Yeung (LRY) offer a rare opportunity to look behind the numerical indicators to the actual business operations the data are intended to capture. The authors' focus is the appropriate statistical treatment of outward direct investments of corporate parents in Hong Kong and Singapore that are themselves foreign-controlled subsidiaries of firms based elsewhere. Such investments may be classified by geographical source or by ultimate ownership. Because of the important role played by foreign-controlled firms, using an ownership definition of source greatly reduces the measured extent of outward FDI originating in Hong Kong and Singapore. Which accounting measure provides the more accurate statistical picture? To address this question, the authors combine information from published statistics with case studies of outward FDI by foreign-controlled Hong Kong parents and of Thai affiliates controlled by parent firms in Hong Kong and Singapore.

Who Is in Control?

Theory distinguishes FDI from other types of international capital flows on the basis of foreign managerial control over host-country operations. The standard empirical proxy for control is a required minimum equity participation in the host-country enterprise. Given the arbitrary character of the proxy, it is not surprising that the required minimum varies across countries, or that the observed degree of control bears little relationship to the statistical measure. The equity participation yardstick also allows joint ventures to be "controlled" simultaneously by source firms in several countries or, as Baldwin and Kimura (chap. 1 in this volume) point out, to be attributed to more than one industry. Moreover, because measurement of FDI almost always relies on cross-border flows, standard data fail to capture equity positions financed by subsidiaries' local borrowing in the host country.

The authors examine 20 cases of ASEAN investments by foreign-owned Hong Kong companies to determine the degree of autonomy of the Hong Kong parent in its outward investment activities. Of these 20, eight are judged to have a substantial degree of autonomy in making decisions with regard to outward investment. But the significance of this finding is unclear. The Hong Kong companies in the sample are all headquarters firms. Each thus has a specific role to play in the parent firm's global management structure as the locus of corporate decision making for the region. Observing a decision-making function in the area of outward FDI does not make the case for autonomy as long

as the top management at the regional headquarters can be replaced should their actions fail to satisfy the needs of the parent. What is observed for these eight is better described as decentralization of a particular function rather than autonomy in an economic sense.

If the question to be answered is whose business interests these investments serve, ultimate ownership may be the appropriate criterion for classifying investments regardless of the location where particular decisions are made. Any systematic differences in the apparent autonomy of Hong Kong subsidiaries may simply reflect differences in management structure (as suggested by LRY's study of Thai affiliates). However, the authors note that the "autonomous" subsidiaries fall into several categories. This finding suggests the interesting further hypothesis that certain types of companies are better served by a decentralized management structure.

Whose Firm-Specific Assets?

The criterion of control focuses on where decisions are made, and for whose benefit. A different possible reason to classify FDI by source is the assumption that the firm-specific assets (FSAs) associated with FDI are related to characteristics of the investing firm's home base. For geographical sources that are notable mainly as tax havens, for example, the Netherlands Antilles, it is clear that any FSA (other than perhaps a certain type of financial know-how) is linked more to the ultimate beneficial owner. But what about a geographical source like Hong Kong or Singapore, one that is financially advantaged but also an important locus for business decision making?

Recent theory views FDI as a cross-border intrafirm conduit for hypothesized FSAs that can be used profitably in advantageous locations abroad. But how are such FSAs identified and measured? Empirical research has shown that differences in the extent of FDI across manufacturing industries is explained in part by industry ratios of R&D to sales and advertising to sales, that is, by expenditures used to create and maintain FSAs. In fact, these ratios are proxies for current or recent *additions* to FSAs rather than for their current importance. Moreover, anecdotal FSAs have less to do with technology in the formal sense than with accumulated practical know-how relevant for successful organization of production, quality control, and marketing.

The Hong Kong case studies summarized in the paper suggest that a foreign-owned parent may be a significant independent source of FSAs even when managers lack decision-making power in the area of outward investment. In fact, the choice of Hong Kong as a regional headquarters site by a significant fraction of all multinationals investing there may reflect the ready availability of certain types of region-specific know-how. Presumably, the FSAs transmitted to Asian affiliates will be a blend of firmwide assets (brand identification, marketing linkages, technology in the narrow sense) and Asia-specific assets (language, culture).

The paper's approach of going behind the data through the use of case stud-

ies is very illuminating for any user of FDI data. Although it cannot resolve the underlying conceptual problems, the use of case studies allows users to be more fully aware of the implications of choosing one data series rather than another. The paper also provides an interesting perspective on the classification scheme proposed by Baldwin and Kimura (chap. 1 in this volume). To add together U.S. trade with foreigners and sales to foreigners of U.S. subsidiaries abroad, it is first necessary to decide which U.S. subsidiaries to include in the calculation. For example, a number of foreign subsidiaries in Mexico have U.S. parents that are themselves controlled by Japanese parents. According to the Baldwin and Kimura methodology, these Mexican enterprises should be classified as Japanese, but the conceptually "right" answer is not obvious. And a practical problem in implementing the Baldwin-Kimura approach is that while the United States, unlike Hong Kong, does collect data on outward FDI, the U.S. data do not separate outward FDI on an ownership basis.

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