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East Asia

*The Hong Kong/China connection:
trade and the wool industry*

Woo Tun-Oy and Sung Yun-Wing

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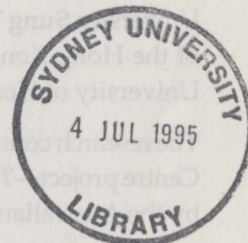
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The Hong Kong/China connection: trade and the wool industry

abstract

The impact of the China connection on the wool industry and trade in Hong Kong in the post-1978 period is examined in this paper, with special emphasis on Hong Kong's relocation of woollen production to China, and a discussion of the impact of China's resumption of WTO membership on the Hong Kong/China connection in the wool industry and trade and a discussion of the future of the Hong Kong/China connection in the wool industry and trade in China's resumption of WTO membership.

Wool is employed by 30 per cent of the labour force of all manufacturing industries and contributes to over 30 per cent of Hong Kong's domestic export earnings and about 23 per cent of the value added of all manufacturing. The textile industry accounts for 3 per cent of employment and 15 per cent of the value added of all manufacturing industries as well as about 7 per cent of domestic export earnings in Hong Kong.

Most of Hong Kong's textiles and clothing exports (over 80 per cent) are for exports which have experienced market growth in the past four decades from \$1K1,000 million in 1960 to \$1K77,156 million in 1992, with an average annual growth rate of 14.5 per cent. Hong Kong became the largest exporter of clothing in the world between 1973 and 1985 except in 1978 and 1979 when it was overtaken by Italy. Since 1986, Hong Kong has remained the world's second largest clothing exporter (by value of domestic exports), except in 1989 when it lost its position marginally to South Korea. However, by value of re-exports (domestic exports plus re-exports) Hong Kong still ranked first between 1968 and 1993, owing to the size of its re-export trade (predominantly originating from mainland China). Similarly, although domestic woollen clothing exports never exceeded 11 per cent of Hong Kong's domestic export value of total clothing during 1973-92, Hong Kong has remained a prominent woollen clothing exporter in the world. By export value, Hong Kong was the top world exporter of knitted woollen clothing in 1988 accounting for 32.7 per cent of world market share and surpassing Italy (30.2 per cent). Nevertheless, the growth of Hong Kong's domestic exports of clothing and textiles did slow down after the mid-1970s and the relative

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Abstract

The Economics Division acknowledges the assistance of the Wool Research Agency in the preparation of this paper. The paper examines the impact of the 1978-80 recession on the wool industry and trade in Hong Kong. The impact of the 1978-80 recession on the wool industry and trade in Hong Kong is examined in this paper with special emphasis on Hong Kong's reduction of wool production to China, and a discussion of the impact of China's resumption of WTO membership on the Hong Kong-China connection in the wool industry and trade and a discussion of the future of the Hong Kong-China connection in the wool industry and trade in China's resumption of WTO membership.

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the Hong Kong/China connection: trade and the wool industry

Since the 1950s, of all manufacturing industries in Hong Kong, the textiles and clothing industries have been most important in providing jobs and generating income and foreign exchange. Clothing replaced textiles as Hong Kong's largest single industry in the 1960s and has continued to maintain the top position since then. Currently, the clothing industry alone employs over 30 per cent of the labour force of all manufacturing industries and contributes to over 30 per cent of Hong Kong's domestic export earnings and about 25 per cent of the value added of all manufacturing. The textile industry accounts for 9 per cent of employment and 10 per cent of the value added of all manufacturing industries as well as about 7 per cent of domestic export earnings in Hong Kong.

Most of Hong Kong's textiles and clothing outputs (over 80 per cent) are for exports, which have experienced market growth in the past four decades from \$HK1,010 million in 1960 to \$HK77,156 million in 1992, with an average annual growth rate of 14.5 per cent. Hong Kong became the largest exporter of clothing in the world between 1973 and 1985 except in 1978 and 1979 when it was overtaken by Italy. Since 1986, Hong Kong has remained the world's second largest clothing exporter (by value of domestic exports), except in 1988 when it lost its position marginally to South Korea. However, by value of total exports (domestic exports plus re-exports) Hong Kong still ranked first between 1988 and 1993, owing to the size of its re-export trade (predominantly originating from mainland China). Similarly, although domestic woollen clothing domestic exports never exceeded 11 per cent of Hong Kong's domestic export value of total clothing during 1979-93, Hong Kong has remained a prominent woollen clothing exporter in the world. By export value, Hong Kong was the top world exporter of knitted woollen clothing in 1988 accounting for 32.7 per cent of world market share and surpassing Italy (30.2 per cent). Nevertheless, the growth of Hong Kong's domestic exports of clothing and textiles did slow down after the mid-1970s and the relative

importance of the clothing industry in Hong Kong declined correspondingly. The slowdown of domestic export growth of clothing and textiles has, however, been compensated by a dramatic increase in re-export trade: the ratio of the value of re-exports to domestic exports for clothing and textiles in 1977 was 2.22 per cent and 44.51 per cent respectively, which surged up to 27.98 per cent and 177.02 per cent in 1987 and then further to 126.05 per cent and 436.07 per cent respectively in 1993.

Theoretically, the growth performance of Hong Kong's clothing industry depends on changes of its own supply conditions relative to other industries in Hong Kong and clothing industries of other overseas economies, the demand conditions in overseas markets and the trade policies practised by Hong Kong's trade partners, especially those specifically on Hong Kong's clothing exports, and finally the capability of Hong Kong's clothing industry to adapt to these changes. Since the mid-1970s, the growth of Hong Kong's clothing and textiles industries has been hindered by labour shortages, a rapid upsurge in rentals and wage rates, the emergence and strengthening of overseas competitors, as well as various protection policies imposed on Hong Kong's clothing and textiles exports under the Multifibre Arrangement (MFA). From the mid-1980s, however, the effects of China's re-opening of its economy have over-shadowed all these effects except one—US policies against Hong Kong's clothing and textiles trade and on trade with China in general. Since 1979, China's open policies, accompanied by various fundamental reform of economic administration and development policies, have created ample opportunities for Hong Kong industries to lower production costs, evade trade restrictions, diversify production and, to a lesser extent, expand their product market. These new opportunities have come at a time when Hong Kong industries are hit by problems of high labour and rental costs and protection policies. Mass utilisation of the opportunities of the 'China factor' have brought about substantial and far-reaching changes in spatial division of labour, output and employment compositions, trade pattern, industrial organisation and income distribution in Hong Kong. The 'China connection' has played a crucial role in sustaining Hong Kong's economic growth since the mid-1980s.

Trade and production of woollen products in Hong Kong¹

Owing to geographical and climatic reasons, the wool industry in Hong Kong is far less important than the cotton and man-made fibre industries. During 1979–93, for each and every year, the value of domestic exports and total exports of woollen products (wool tops plus woollen yarn + woollen fabrics plus woollen clothing) never exceeded 10 per cent of that of textile yarn, fabrics, made-up articles and related products (SITC 65) and articles of apparel and clothing accessories (SITC 84) (Table 1).

Woollen clothing

Of all woollen products, clothing accounts for the majority of total output and export value in Hong Kong, contributing to more than 90 per cent of domestic export and over 70 per cent of total export value of all woollen products. Woollen clothing usually accounted for a small proportion of the export value of all clothing, but its share (in the export value of total clothing) has declined since the mid-1980s. In Hong Kong dollar terms, the domestic export value of woollen clothing grew at an average annual rate of 20.42 per cent during 1979–83, higher than that achieved by total clothing (14.3

Table 1 Percentage shares^a of clothing and textiles in Hong Kong's total merchandise exports and percentage shares of woollen products in Hong Kong's export of clothing and textiles, 1979–93 (per cent)

	DX_{C+T}/DX	TX_{C+T}/TX	WC_{DX}/DX_C	WC_{TX}/TX_C	WT_{DX} (HK\$Mn)	WT_{DX}/DX_{C+T}	WT_{TX} (HK\$Mn)	WT_{TX}/TX_{C+T}
1979	43.28	36.15	7.71	7.41	1605.5	6.64	1705.6	6.21
1980	40.77	34.26	9.53	9.52	2347.1	8.44	2912.5	8.65
1981	41.77	35.01	10.41	10.17	3113.3	9.27	4002.5	9.36
1982	40.80	34.01	8.91	8.87	2787	8.22	3723.9	8.60
1983	39.70	33.46	9.50	9.36	3567.3	8.61	4768.9	8.87
1984	40.12	33.53	8.96	8.70	4460.5	8.06	6096.9	8.21
1985	40.60	32.48	8.74	8.39	4110.1	7.79	5720.2	7.49
1986	40.99	34.93	8.90	8.60	4848.9	7.68	7259.9	7.52
1987	41.65	33.84	8.53	8.39	5815.4	7.15	9079.0	7.10
1988	38.07	28.79	8.76	8.61	6141.4	7.41	10719.2	7.55
1989	39.57	29.54	8.46	8.36	6345.3	7.15	11845.0	7.03
1990	39.43	28.76	8.06	6.95	6065.5	6.81	10949.3	5.95
1991	40.45	28.16	9.35	7.76	7339.7	7.85	13891.9	6.44
	(40.30)	(28.06)	(9.38)	(7.75)		(7.88)	(13911.8)	(6.48)
1992	40.31	25.72	10.57	8.55	8375.0	8.87	17105.4	7.12
1993	39.47	23.82	8.95	7.20	6619.0	7.52	15565.3	6.25

^aPercentage shares: by value, in Hong Kong dollars

Notes: DX: domestic exports of all merchandise; DX_{C+T} : domestic exports of clothing (SITC 84) and Textiles (SITC 65); TX: total exports of all merchandise; total exports = domestic exports + re-exports; TX_{C+T} : total exports of clothing and textiles; WC_{DX} : domestic export of woollen clothing; DX_C : domestic export of clothing; WC_{TX} : total exports of woollen clothing; TX_C : total exports of clothing; WT_{DX} : domestic exports of wool tops, woollen yarn, woollen fabrics and woollen clothing; WT_{TX} : total exports of wool tops, woollen yarn, woollen fabrics and woollen clothing.

Figures in parentheses are compiled in terms of Standard International Trade Classification Revision 3 (SITCR3), as are the figures for 1992 and 1993; 1991 figures without parentheses and figures for 1979–90: compiled in terms of SITC Revision 2 (SITCR2).

Sources: Census and Statistics Department, *Hong Kong Trade Statistics*, Hong Kong, various December issues; *Hong Kong Review of Overseas Trade*; data on re-exports of woollen clothing in 1991, 1992 and 1993 compiled from unpublished data supplied by Census and Statistics Department, Hong Kong.

per cent). Between 1984 and 1993, however, the growth rate of woollen clothing (7.02 per cent) turned out to be lower than that of total clothing (7.66 per cent). Nevertheless, for the whole period 1979–93, the average annual growth rate of the domestic export value of woollen clothing (10.67 per cent) was still higher than that of total clothing (9.51 per cent). On the other hand, in terms of physical quantity, during 1979–93, the corresponding annual growth rate of woollen clothing (1.92 per cent) was much lower than that of total clothing (3.17 per cent). This was attributable to the relatively stagnant and even negative growth (by quantity) of woollen clothing domestic exports during 1984–93 (with an average annual growth rate of 0.364 per cent for 1984–93 or 3.25 per cent during 1984–92) in contrast with the rapid growth during 1979–83 (with an average annual rate of 7.75 per cent). The corresponding annual growth rate for total clothing during 1984–93 was however higher than that between 1978 and 1983: 3.24 per cent compared with 2.99 per cent respectively. During 1989–92 when Hong Kong-related outward processing activities in China mushroomed, domestic exports of woollen clothing did grow (by quantity) faster than that of total clothing: 2.35 per cent and 0.62 per cent respectively. Similarly, although (by physical quantity) during 1979–93, the average annual growth rate of Hong Kong's total merchandise domestic exports was 6.58 per cent, much higher than that of total clothing and woollen clothing, the corresponding growth rate for total merchandise during 1989–92 was however only 0.099 per cent. It appears that the dramatic growth of Hong Kong-related outward processing activities in China has deterred Hong Kong's domestic export growth. Such impact on woollen clothing during 1989–92 was smaller than on total clothing and particularly, on total merchandise exports.

Although most of Hong Kong's domestic output of woollen clothing is exported, at the same time Hong Kong has imported over HK\$6 billion a year worth of woollen clothing in recent years. Thus, the value of imports has become increasingly close to that of domestic exports. In 1979, import value was equivalent to 14.21 per cent of domestic export value. In 1993, it accounted for over 90 per cent. Furthermore, the percentage share of re-exports in Hong Kong's total import value of woollen clothing has risen rapidly after 1985. It surged up from 3.79 per cent in 1979 to 28.35 per cent in 1985 and then to about 80 per cent in recent years. In fact, starting from 1985, Hong Kong's retained imports remained quite stable, falling between HK\$1.1–1.5 billion every year. Thus, since the mid-1980s, Hong Kong's imports of woollen clothing has served the interest of overseas markets more than Hong Kong citizens.

Non-clothing woollen products (wool tops, woollen yarn, woollen fabrics), during 1979–93, the average annual growth rate of domestic export value (in Hong Kong dollars) was 9.45 per cent, lower than that of all textile non-clothing products (SITC 65) (10.37 per cent). Note that, the domestic export value of non-clothing woollen products grew very rapidly during 1979–83, reaching the peak level (HK\$304.3 million) in 1983, but fluctuated within the range HK\$190–265 million afterwards. Nevertheless,

(both by quantity and value) domestic exports of wool tops, woollen yarn and woollen fabrics have remained far less important than re-exports especially since the mid-1980s. Including re-exports, the total export value of woollen products increased from HK\$1,705.6 million in 1979 to HK\$15,565.3 million in 1993 at an average annual growth rate of 17.11 per cent (19.4 per cent for 1979–92), practically the same as that for total textile products and clothing (SITC65 + SITC84) combined (17.06 per cent). The average annual growth rate of the total exports of woollen clothing during 1979–93 was 15.48 per cent, slightly lower than that of total clothing (15.71 per cent). However, during 1979–88, the corresponding growth rate was 19.78 per cent and 17.8 per cent respectively. The growth rate of woollen clothing total exports during 1989–93 should have been lower than that of total clothing (8.12 per cent and 12.04 per cent respectively) which could be attributable to much slower growth in re-exports for the former (21.11 per cent in contrast with 29.68 per cent). Nevertheless, for both woollen and total clothing, the shares of re-exports in total export value have surged up substantially since 1987. For non-clothing woollen products, the average annual growth rate of total exports during 1979–93 was 21.76 per cent, higher than that of total textile products (20.48 per cent). However, the growth of non-clothing woollen product export value became relatively stagnant (due to stagnant growth of re-exports after 1988) so that the average annual growth rate during 1989–92 was only 8.16 per cent, much lower than that of total textile exports (14.22 per cent). Of the total export value of all non-clothing woollen products, woollen yarn accounts for more than 70 per cent of the total. Nevertheless, since the mid-1980s, the share of woollen fabrics has increased.

On the whole, although Hong Kong has been one of the leading world exporters of woollen clothing, the manufacture of woollen clothing and other woollen products has never been a substantial source of income and foreign exchange earnings for Hong Kong. As a matter of fact, during 1979–93, the total export value contributed by the wool industry in Hong Kong never exceeded 4 per cent of Hong Kong's total export earnings. Clothing remains the most important sector of the wool industry, generating over 70 per cent of the total export value. By quantity, domestic exports of woollen clothing experienced rapid growth during 1979–83, faster than that of total clothing. Growth has slowed since the mid-1980s, lagging behind that of total clothing. However, it seems that the growth of woollen clothing domestic export was less impaired by the craze for production relocation to China which assumed great momentum during 1989–92. Nevertheless, with the dramatic increase of outward processing activities in China, re-export of woollen clothing has surged up rapidly since the late 1980s, much faster than domestic export growth, but at a rate still lower than that of total clothing and total merchandise. Hong Kong domestic and total exports of wool tops, woollen yarn and woollen fabrics increased rapidly during 1979–83 after which it decreased somewhat and fluctuated. In general, total exports grew markedly from 1979 onward until 1988. Afterwards, it fluctuated and reached the peak level (HK\$3347.7 million).

Wool tops and woollen yarn exports usually constitute a predominant share of the total exports of non-clothing woollen products. However, the export value of tops and yarn declined after 1983. On the contrary, the (value) share of woollen fabrics was on a strong upward trend during 1979–93.

Woollen yarn

Hong Kong does not have advantages in production of raw materials and intermediate inputs for manufacture of finished woollen goods owing to the lack of a significant husbanding sector and inadequate supply of land area for pasture, Hong . It is not economical for Hong Kong to import raw wool for processing as well. In fact, with the rapid increases in wage rates and the emergence of cheaper supply sources, starting from the 1970s, Hong Kong's advantages in yarn and fabric production deteriorated further. In 1970, Hong Kong's domestic output of woollen and worsted yarn reached 12,519 ton, the highest ever recorded in Hong Kong's history of woollen yarn production. In that year there were thirteen wool spinning mills employing 4,044 workers. The number of spindles installed amounted to 83,000 of which 63,000 were for spinning worsted yarn. After 1970, however both the domestic output and employment level of the spinning industry declined. In 1978, domestic output was 6,065 ton and total employment was 1,356. Before 1978, a major proportion of the domestic output of woollen yarn (over 80 per cent) was consumed locally for manufacture of woollen clothing. In 1970 only 4.11 per cent of the domestic output was exported. Since 1979, Hong Kong's wool spinning industry has shifted to specialise further in producing high-quality worsted yarn to suit domestic demand while most woollen yarn was imported, in line with the law of comparative advantage.

With China's pursuit of open door policy, Hong Kong's domestic exports of woollen yarn increased dramatically in the early 1980s, although its domestic output remained stagnant. Domestic exports increased from 1,386 ton in 1978 to 7,536 ton in 1983, primarily for export to Mainland China. During 1980–83, domestic export should have accounted for a predominant share of Hong Kong's domestic output of woollen yarn: in 1981 (the last year when Hong Kong authority released detailed data on Hong Kong's domestic output of woollen yarn including mixtures) the percentage share was 74.82 per cent. The percentage share should have been larger than 90 per cent in 1983 when domestic export reached the peak level of 7,535 ton. After 1983, however, as a result of the changing the definition of the place of origin for Hong Kong's domestic exports of woollen clothing in late 1984 from the mid-1980s onward, once again, domestic production of woollen yarn mainly served domestic production needs. Unfortunately, as the Hong Kong government did not release comprehensive domestic production figures for woollen yarn and mixtures for all years since 1982, the exact shares of domestic exports in Hong Kong's total domestic output for many years after 1981 is not known. Nevertheless, according to scattered information (mainly disclosed

in various *Surveys of Industrial Production*) on domestic output value of woollen yarn, we find the value share of domestic exports in domestic output (without isolating the surplus margin of export trade) in 1984 was 93.32 per cent while the average value share during 1986–87 and 1989–90 was 44.3 per cent. Note also that in 1990, there were only three wool spinning mills in Hong Kong employing 737 workers and turning out woollen yarn worth HK\$397.9 million of gross output value. In physical quantity, the total output should not exceed 6,200 ton. Obviously, the size of Hong Kong's wool spinning industry contracted substantially in the past two decades. Nevertheless, in contrast with domestic export performance, domestic production of woollen yarn, at least woollen and worsted yarn excluding mixtures improved after 1983, with domestic output in 1991 double that in 1983.

With deterioration of advantages in the production of woollen yarn, Hong Kong has to rely heavily on imports. During 1979–93, Hong Kong's retained import of woollen yarn fluctuated quite severely from year to year within the range 5,000–16,000 ton. During 1986–92, for each year, the retained import exceed 10,000 ton. Nevertheless after 1984, most of Hong Kong's imported woollen yarn were re-exported. In 1985, (by quantity) re-exports accounted for 72.02 per cent of Hong Kong's total imported woollen yarn, much larger than the share in 1979 (8.83 per cent). The share of re-exports rose further to 82.56 per cent in 1993.

Wool

Woollen yarn may be either acquired directly by import or by spinning wool into yarn. Since Hong Kong has practically no domestic production of raw wool it has to import wool for its spinning industry. However, owing to increasing shortage of land area and greater emphasis on environmental protection, Hong Kong's disadvantages in processing raw wool have accelerated. Thus, most of Hong Kong's imported wool has been for re-export. Including wool tops, import of wool increased from 8,295 ton in 1979 to 10,741 ton in 1985 and then to 39,863 ton in 1993. Excluding wool tops, the corresponding figures are 5,300 ton, 5,998 ton and 21,188 ton. Excluding wool tops, the percentage share of re-export in total imports of wool rose from 44.99 per cent in 1979 to 67.56 per cent in 1985 and 102.77 per cent in 1993. As expected, Hong Kong's domestic export of wool is insignificant. It fell within the range of 460–660 ton during 1979–84. It reached the peak level of 1048 ton (excluding wool tops) in 1986 and declined to 177 ton in 1993 with the minimum 122 ton recorded in 1990. Domestic exports of wool from Hong Kong were primarily 'other wool' unrelated to raw wool.

Woollen fabrics

It is believed, similar to textile fabrics as a whole, a large proportion of the domestic output of woollen fabrics is for domestic consumption; for manufacturing clothing

and other piece goods. In fact, during 1979–84, the annual domestic export of woollen fabrics ranged from 25–300,000 square metres worth at most HK\$6.5 million. In 1985, domestic exports dropped. However, since 1986, woollen fabric domestic exports have risen steadily, from HK\$14.824 million to HK\$45.76 million in 1993. On the other hand, re-export trade of woollen fabrics both by quantity and value far exceeded domestic exports, with re-exports increasing from HK\$34.68 million in 1979 to HK\$125.764 million in 1984. After a sharp drop in 1985, total re-exports grew significantly from 1986 onwards. In 1993, the quantity of re-exports amounted to 19047 thousand square metres worth HK\$763.51 million which increased at an average annual rate of 22.34 per cent by quantity or 27.45 per cent by value against that in 1979. Thus, in 1993, total exports of woollen fabrics amounted to 20,362 thousand square metres with a total value of HK\$809.265 million.

Relative to exports, Hong Kong has been a prominent importer of woollen fabrics. Imports have always been larger than total exports, whether by quantity or by value. In 1979, total imported woollen fabrics equalled 12,922 thousand square metres, much larger than total exports, of which 87.1 per cent were retained in Hong Kong. In 1984, total imports increased to 21,421.8 thousand square metres of which 22.06 per cent were retained. After some decreases in 1985 and 1986, imported fabrics surged up again in 1987 to 23,277 thousand square metres, worth HK\$815.41 million and then increased to 38,083 thousand square metres at the value of HK\$1,749 million in 1993. At the same time, the percentage share of retained imports dropped substantially. In 1993, retained imports accounted for 49.93 per cent of total imports. Unfortunately, statistical data concerning Hong Kong's domestic output of woollen fabrics are unavailable.²

Wool, woollen yarn and woollen fabrics combined

Hong Kong's trade of wool, woollen yarn and woollen fabric not only depends on Hong Kong's comparative advantage in their production but also on its advantages in the production of woollen clothing. Hong Kong's retained imports depend directly on its domestic supply condition, and foreign demand for woollen clothing (inclusive of overseas economic's trade policies), while Hong Kong's total exports (especially re-exports to China and re-exports originated from China) reveal the influence of the China factor and deterioration of Hong Kong's advantages in woollen product production would fuel its importance. For instance, in 1979, retained imports accounted for 86.18 per cent of the total import value of wool, woollen yarn and woollen fabrics. The corresponding share decreased to 57.15 per cent in 1985 and then further to 33.79 per cent in 1993. Similarly, the percentage share of re-exports in total exports of wool, woollen yarn and woollen fabrics combined increased from 70.26 per cent in 1979 to 86.56 per cent and 95.57 per cent in 1985 and 1993 respectively. Such changes should have been attributable primarily to the growing importance of the 'China factor'.

Table 2 China's shares in Hong Kong's wool^a trade, 1979-93

	M (ton)	M/DX ^w (per cent)	DX (ton)	RX (ton)	TX (ton)	RX _c (ton)	RX _c /DX ^w (per cent)
1979	213(2.57)	46.14	0(0)	56.6(2.07)	56.6(1.77)<0.90>	..	..
1980	91(1.00)	17.30	0(0)	57(1.92)	57(1.63)<1.82>	..	..
1981	29(0.35)	6.30	0(0)	78.72(2.03)	787.2(1.81)<1.96>	..	..
1982	8.9(0.11)	1.66	0(0)	308(7.25)	308(6.44)<5.25>	..	..
1983	8.8(0.10)	1.35	0(0)	345.9(8.19)	345.9(7.10)<7.32>	..	..
1984	147(1.74)	23.48	0(0)	469(12.74)	469(10.89)<11.87>	..	..
1985	162(1.50)	30.06	20(3.71)	1738(32.87)	1758(30.17)<30.20>	..	..
1986	69(0.27)	13.83	30(6.01)	14826(79.35)	14856(77.44)<75.92>	178	35.67
1987	100(0.45)	9.50	18(1.71)	9561(68.43)	9579(63.75)<62.70>	64	6.08
1988	632(3.64)	145.62	21(4.84)	7705(69.80)	7726(67.34)<40.94>	39	8.99
1989	369(2.26)	119.03	29(9.35)	7357(65.91)	7386(64.29)<42.98>	100	32.26
1990	590(5.34)	483.61	3(2.46)	3536(57.29)	3539(56.23)<38.78>	380	311.48
1991	314(1.44)	105.37	13(7.30)	10286(70.09)	10299(68.78)<56.76>	433	145.30
1992	657(1.60)	335.2	2(1.02)	19575(58.77)	19577(58.44)<59.54>	1177	600.51
1993	1117(2.89)	631.07	0(0)	32167(88.14)	32167(87.72)<86.20>	1298	733.33

Notes: ^aWool includes greasy wool, degreased wool, other wool and wool tops

M : Hong Kong's imported wool from China

DX^w : Hong Kong's total domestic export of wool

DX : Hong Kong's domestic export of wool to China

RX : Hong Kong's re-export of wool to China

TX : Hong Kong's total export of wool to China = DX + RX

RX : Hong Kong's re-export of wool of China origin

() : China's share in Hong Kong's total trade volume (by quantity) of the pertinent item

< > : China's share in Hong Kong's total export of wool (by value)

Sources: Census and Statistics Department, Hong Kong, *Hong Kong Trade Statistics*, various December issues.

Retained imports of woollen products did not experience marked growth especially after 1987 which thus explains the stagnant growth of the domestic export of woollen clothing during 1989–93. Furthermore, Hong Kong has turned out to be a net importer (by value) of wool and woollen semi-manufactures in accordance with the law of comparative advantage. However, with the rapid growth of re-exports, despite of Hong Kong's meagre domestic export level, the trade gap (import-export/import) in recent years was around 40 per cent with a low of 30.71 per cent in 1989.

China's share in Hong Kong's woollen product trade

Imports

The quantity share of wool yarn imports from China in Hong Kong's total imports remained small until 1985 but has increased substantially since 1986. In 1992, the share reached 46.73 per cent, much larger than that in 1985 (8.04 per cent). The import share of China's woollen fabrics was relatively stable. On average, the share did have some growth after 1985. The average share during 1979–85 was 39.6 per cent while that for 1986–93 increased to 46.03 per cent with the peak level of 59.71 per cent in 1988. As for wool and wool tops, China's share remained small, which never exceeded 6 per cent in the past fifteen years. Nevertheless, the average share during 1986–93 (2.24 per cent) was larger than that for 1979–85 (1.05 per cent). Note that the value share of Chinese products in Hong Kong's imports of woollen yarn and woollen fabrics were smaller than the corresponding quantity shares. On average, the unit value of imports from China was lower than that of Hong Kong's total imports of woollen yarn and fabrics.

On average, China supplied 10.76 per cent of Hong Kong's total imported wool, woollen yarn and woollen fabrics during 1979–85 which increased to 26.18 per cent during 1986–93. Excluding wool but including wool tops as woollen yarn, the corresponding share was 11.46 per cent and 26.32 per cent respectively (Table 5). Of the total value of Hong Kong's imported Chinese wool, woollen yarn and woollen fabrics, the value of woollen fabrics ranked first before 1985 but has been overtaken by that of woollen yarn since 1986. During 1990–93, the average percentage share of woollen yarn was over 70 per cent.

The rapid growth of imports from China since 1986 has been primarily attributable to the dramatic upsurge of Hong Kong's re-exports of China origin which is in turn related to China's own export drive as well as the rise of Hong Kong's outward processing activities in China. The value of Hong Kong's re-exports of wool, woollen yarn and woollen fabrics originated from China increased from HK\$283.153 million

Table 3 China's shares in Hong Kong's woollen yarn trade, 1979-93

	M ^y (ton)	M ^y /DX ^{wy} (per cent)	DX ^y (ton)	RX ^y (ton)	TX ^y (ton)	RX (ton)	RX/DX ^{wy} (per cent)
1979	356(2.38)	20.73	668(38.84)	348(26.71)	1016(33.61)<30.51>	..	..
1980	828(3.42)	22.04	2430(64.69)	7393(81.65)	9823(76.68)<72.99>	..	..
1981	746(3.70)	18.22	2006(48.99)	12891(84.71)	14897(77.14)<74.55>	..	..
1982	950(4.70)	16.52	4989(86.74)	12666(87.56)	17655(87.33)<83.89>	..	..
1983	1415(5.44)	18.78	6968(92.47)	13250(86.32)	20218(88.35)<83.13>	..	..
1984	1814(7.60)	31.52	5239(91.05)	16182(88.04)	21421(88.76)<83.33>	..	..
1985	1822(8.04)	50.75	3261(90.84)	14406(88.3)	17667(88.76)<85.50>	..	..
1986	3877(12.74)	114.21	3039(89.51)	16165(88.48)	19204(88.64)<86.38>	3283	96.70
1987	7916(22.37)	213.03	3379(90.93)	19029(89.0)	22408(89.29)<87.12>	5480	147.47
1988	9447(28.83)	370.03	2361(92.48)	20343(89.99)	22704(90.24)<86.42>	8294	324.87
1989	10484(30.48)	401.98	2251(86.31)	21845(90.25)	24096(89.87)<85.54>	9802	375.84
1990	9162(31.79)	372.91	2220(90.35)	18023(91.01)	20243(90.93)<87.73>	8806	358.40
1991	17845(42.42)	597.02	2782(93.07)	24662(91.86)	27444(91.98)<89.34>	12845	429.74
1992	23420(46.73)	946.66	1476(59.66)	31250(91.98)	32726(89.79)<87.45>	17762	717.95
1993	15561(40.22)	723.09	2069(96.14)	29127(91.19)	31196(91.50)<89.57>	15653	727.37

Notes: M^y : Hong Kong's imported woollen yarn from China

DX^{wy} : Hong Kong's total domestic export of woollen yarn

DX^y : Hong Kong's domestic export of woollen yarn to China

RX^y : Hong Kong's re..export of woollen yarn to China

TX^y : Hong Kong's total export of woollen yarn to China = DX^y + RX^y

RX : Hong Kong's re..export of woollen yarn of China origin

() : China's share in Hong Kong's total trade of the pertinent item (by quantity)

< > : China's share in Hong Kong's total trade of the pertinent item (by value)

Source: Census and Statistics Department, Hong Kong, *Hong Kong Trade Statistics*, various December issues.

Table 4 China's shares in Hong Kong's woollen fabric trade, 1979-93

	M ^F ('000 m ²)	M ^F /DX ^{wF} (per cent)	DX ^F ('000 m ²)	RX ^F ('000 m ²)	TX ^F ('000 m ²)	RX ('000 m ²)	RX/DX ^{wF} (per cent)
1979	4181(32.36)	46424.61	0(0)	109.6(6.58)	109.6(6.54)<3.17>	..	..
1980	6210(41.46)	10197.21	38.65(63.47)	327.5(13.23)	366.2(14.44)<9.83>	..	..
1981	6238(44.23)	23471.42	10.91(42.30)	639(29.40)	649.9(29.56)<18.50>	..	..
1982	5696(39.28)	14814.81	19.13(49.76)	1152.6(45.94)	1171.7(46.0)<32.89>	..	..
1983	6452(37.68)	6937.93	33.75(36.29)	1721.5(47.90)	1755.3(48.15)<33.60>	..	..
1984	9166(42.79)	3109.30	255.51(86.67)	2550(53.98)	2805.5(55.89)<43.78>	..	..
1985	8260(39.39)	4440.86	117(62.90)	1578(43.51)	1695(44.45)<35.04>	..	..
1986	8360(41.95)	1692.31	405(81.98)	2189(47.15)	2594(50.50)<46.77>	2648	536.03
1987	11716(50.33)	2037.57	431(74.96)	2736(41.25)	3167(43.94)<35.86>	3738	650.09
1988	15813(59.71)	2178.10	426(58.68)	2852(38.29)	3278(40.10)<29.39>	5336	734.99
1989	9799(41.84)	1125.03	676(77.61)	3526(51.37)	4202(54.32)<34.45>	3760	431.69
1990	8729(39.60)	946.75	810(87.85)	5152(62.14)	5692(64.71)<48.82>	5195	563.45
1991	11388(43.53)	1365.47	762(91.37)	7544(68.79)	8306(70.38)<61.25>	6198	743.17
1992	15314(47.42)	1320.17	1040(89.66)	11036(74.88)	12076(75.95)<70.02>	8156	703.10
1993	16700(43.85)	1269.96	1297(98.63)	14970(78.60)	16267(79.89)<74.16>	9413	715.82

Notes: M^F : Hong Kong's imported woollen fabrics from China

DX^{wF} : Hong Kong's total domestic export of woollen fabrics

DX^F : Hong Kong's domestic export of woollen fabrics to China

RX^F : Hong Kong's re-export of woollen fabrics to China

TX^F : Hong Kong's total export of woollen fabrics to China = DX^F + RX^F

RX : Hong Kong's re-export of woollen fabrics of China origin

() : China's share in Hong Kong's total trade of the pertinent item (by quantity)

< > : China's share in Hong Kong's total trade of the pertinent item (by value)

Source: Census and Statistics Department, Hong Kong, *Hong Kong Trade Statistics*, various December issues.

in 1986 to HK\$1588.304 million in 1992 at an average annual growth rate of 33.30 per cent, higher than the corresponding growth rate of total imports (27.09 per cent). In 1993, the share of re-exports of China origin in total imports from China was 86.5 per cent, substantially higher than that in 1986 (51.87 per cent). In fact, in 1993, the value of Hong Kong's retained imports of Chinese wool, woollen yarn and woollen fabrics (HK\$216.394 million) was even lower than that in 1986 (HK\$262.75 million). Excluding wool but including wool tops as woollen yarn, retained imports from China decreased from HK\$262.796 million in 1986 to HK\$222.631 in 1993 (Table 5). The role of imports from China has changed substantially from meeting mainly the demand of Hong Kong to meeting the needs of other overseas economies via re-export trade.

Exports

Compared with import trade, as expected, with the rise of investment activities, Hong Kong's exports of woollen raw materials and semi-manufactures to China have experienced much more spectacular growth. The total export value of wool, woollen yarn and woollen fabrics to China increased from HK\$32.622 million in 1979 to HK\$3799.49 million in 1993 at an average annual growth rate of 40.47 per cent. Domestic exports however grew much slower, from HK\$18.43 million 1979 to HK\$181.725 million in 1993 at an average annual rate of 17.76 per cent, which definitely implies a much higher growth rate of re-exports to China (48.55 per cent) during the same period. In fact, the peak domestic export value was realised in 1983 and 1984 and has not been surpassed since then. The domestic export value of wool, woollen yarn and woollen fabrics to China increased enormously during 1979-83 from HK\$18.428 million to HK\$271.868 million at an average annual rate of 95.98 per cent, but declined drastically in 1985. The decrease in the mid-1980s was due to the tremendous decrease of the domestic export of woollen yarn to China. Nevertheless, even during 1979-83, the growth rate of domestic exports still fell short of re-exports. The percentage share of domestic exports in total exports to China declined accordingly. In 1993, the share decreased to 4.78 per cent from 56.49 per cent in 1979.

Both domestic exports and total exports to China have grown faster than Hong Kong's total domestic exports and total exports of wool, woollen yarn and woollen fabrics in the past fifteen years. As a result, the percentage share of the value of domestic exports and total exports to China in Hong Kong's total domestic and total exports increased from 31.87 per cent and 16.78 per cent in 1979 to 85.95 per cent and 92.7 per cent respectively. Starting from 1982, on average, China purchased 80.9 per cent and 74.95 per cent of the value of Hong Kong's domestic exports and total exports of wool, woollen yarn and woollen fabrics respectively. Besides this, China has become an important supply origin of Hong Kong's re-exports. In 1986, re-exports of China origin accounted for 15.64 per cent of Hong Kong's total re-export value of wool, woollen yarn and woollen fabrics. The share surged up to an average of 36.74 per cent during

Table 5 China's shares in Hong Kong's trade of wool, woollen yarn and woollen fabrics, 1979-93

	M^{NC} (HK\$m)	M^{NC}/DX^{WNC} (per cent)	TX^{NC} (HK\$m)	RX^C (HK\$m)	RX^C/DX^{WNC} (per cent)	M^{NC1} (HK\$m)	M^{NC1}/DX^{WNC1} (per cent)	OP^{NC1}/DX^{WNC1} (per cent)	TX^{NC1} (HK\$m)	RX^{C1} (HK\$m)	MR^{NC1} (HK\$m)	RX^{C1}/DX^{WNC1} (per cent)
1979	66.68(6.75)	115.31	32.62(16.78)	..	..	63.53(7.13)	117.84	..	32.11(22.05)	..	..	..
1980	132.86(8.11)	98.35	357.95(59.14)	..	..	131.20(8.60)	100.77	..	356.67(64.91)	..	..	..
1981	144.21(12.14)	82.44	634.69(63.87)	..	..	142.34(13.25)	84.04	..	633.36(70.20)	..	..	..
1982	162.53(10.59)	72.23	720.82(71.18)	..	..	162.20(11.41)	74.47	..	714.23(79.35)	..	..	..
1983	218.23(9.76)	69.80	888.15(71.27)	..	..	217.96(10.44)	71.63	..	879.66(77.81)	..	..	..
1984	388.44(14.44)	136.76	1188.06(74.02)	..	..	384.04(15.08)	139.89	..	1179.44(79.01)	..	..	..
1985	393.6(13.55)	203.58	1070.21(74.42)	..	..	391.49(14.31)	213.85	..	1046.98(79.83)	..	..	..
1986	545.90(14.88)	254.69	1630.27(80.50)	283.15	132.10	545.13(16.94)	263.43	..	1338.45(82.32)	282.34	262.80	136.44
1987	984.74(21.57)	380.54	1877.39(76.60)	512.04	197.87	982.08(23.66)	400.17	..	1613.55(78.06)	511.25	470.83	208.32
1988	1688.51(30.44)	666.15	2093.45(67.22)	825.22	325.56	1355.78(26.26)	552.45	..	1879.76(67.11)	823.60	532.17	335.60
1989	1607.40(28.08)	596.05	2257.63(68.72)	888.48	329.46	1350.05(24.86)	514.65	65.88	2078.67(76.48)	881.65	468.40	336.09
1990	1174.66(27.11)	464.58	1916.27(74.53)	859.40	339.89	1051.58(25.27)	421.48	76.71	1827.54(80.11)	847.30	204.28	339.61
1991	1686.27(29.99)	657.41	2626.28(79.25)	1162.91	453.37	1678.76(31.12)	664.35	136.19	2496.7(80.61)	1149.02	529.74	454.71
1992	2300.62(31.22)	1051.13	3484.74(78.25)	1588.30	725.68	2289.49(34.11)	1079.91	248.38	3146.64(82.08)	1556.73	732.77	734.28
1993	1667.53(26.14)	850.59	3799.49(85.95)	1451.14	740.22	1658.51(28.35)	868.17	237.01	3342.67(86.55)	1435.88	222.63	751.63

Notes: M^{NC} : Hong Kong's imported wool, woollen yarn and woollen fabrics (combined) from China; D^{WNC} : Hong Kong's total domestic export of wool, woollen yarn and woollen fabrics (combined); TX^{NC} : Hong Kong's total exports of wool, woollen yarn and woollen fabrics (combined) to China; RX^C : Hong Kong's re-exports of wool, woollen yarn and woollen fabrics (combined) of China origin; M^{NC1} , DX^{WNC1} , TX^{NC1} and RX^{C1} : same as M^{NC} , DX^{WNC} , TX^{NC} and RX^C except the products included are wool tops, woollen yarn and woollen fabrics; OP^{NC1} : estimated value of Hong Kong-involved outward processing trade with China on wool tops, woollen yarn and woollen fabrics = $S_T(M^{NC1})$ where S_T is the value of Hong Kong-involved outward processing trade with China on textile materials, yarn and fabrics etc. (SITC 65) as a proportion of Hong Kong's import of SITC 65 from China; MR^{NC1} : Hong Kong's retained imports of wool tops, woollen yarn and woollen fabrics from China; $M^{NC1} - RX^{NC1}$

() : China's share in Hong Kong's total trade value of the pertinent item

Sources: Census and Statistics Department, Hong Kong, *Hong Kong Trade Statistics*, various December issues; *Hong Kong Review of Overseas Trade*; for data on re-exports of woollen clothing in 1991, 1992 and 1993: compiled from unpublished data supplied by Census and Statistics Department, Hong Kong; Census and Statistics Department, Hong Kong, *Hong Kong External Trade*, various March issues for data on Hong Kong's outward processing trade with China.

1989–93. Rapid growth of re-exports of China origin has led to some significant decreases in the percentage share of retained imports in total imports from China since 1988. The corresponding share declined from 48.21 per cent in 1986 to 13.42 per cent in 1993, enhancing the entrepôt nature of China's exports to Hong Kong.

Despite the rapid growth of trade with China up to 1993, the value of Hong Kong's trade of textile yarn, fabrics and other materials related to Hong Kong-controlled outward processing activities in China had never exceeded 30 per cent of that of textile yarn and fabrics imported from China Census and Statistics Department in Hong Kong. Applying the outward processing ratio of textile yarn and fabrics in 1993 (27.3 per cent) the value of woollen yarn (including wool tops) and wool fabrics related to Hong Kong's outward processing activities in China amounted to HK\$452.78 million showing an increase of 162 per cent over that in 1989 (HK\$172.81 million).

Woollen clothing: import and export

Woollen clothing can be manufactured from yarn or fabrics with mainly labour input, in which China has comparative advantage. Thus, provided China could secure adequate supplies of yarn or fabrics, its export of woollen clothing should be much substantial than imports. Although Hong Kong's domestic and re-export of woollen clothing to China did grow at a rate higher than that of imports from China, even in 1992 when Hong Kong's total exports to China reached the peak (HK\$955.84 million), total exports to China only accounted for 19.34 per cent of imports from China, resulting in a trade surplus of HK\$3985.22 million for China (Table 6). In fact, the China market has remained not so important relative to the western economies. In 1992, China purchased 6.95 per cent and 7.2 per cent of the value of Hong Kong's domestic and total exports of woollen clothing respectively which were the largest even recorded. Similar to woollen yarn and fabrics, Hong Kong's re-export of woollen clothing to China has grown faster than its domestic exports to China. Since 1980, China has supplied more than 70 per cent of Hong Kong's imported woollen clothing. In 1992, imports of woollen clothing from China amounted to HK\$4941.06 million. Most of the imported Chinese woollen clothing were, however re-exported via Hong Kong to other destinations. During 1987–93, Hong Kong's re-export of woollen clothing originated from China increased at an average annual rate of 27.53 per cent, much higher than that of imports from China during the same period (17.23 per cent). In 1986, re-export of China origin was equivalent to 59.75 per cent of imported Chinese woollen clothing. The corresponding share expanded since then. In 1993, it reached 107.75 per cent. Thus, only a small proportion of imported Chinese woollen clothing was retained in Hong Kong. As a matter of fact, during 1986–93, for each and every year, imported Chinese woollen clothing constituted over 90 per cent of the value of Hong Kong's total re-exports (97.13 per cent in 1993).

Table 6 China's shares in Hong Kong's woollen clothing trade, 1979-93 (HK\$ million)

	M ^C	M ^C /DX ^{WC} (per cent)	DX ^C	RX ^C	TX ^C	RX	RX/DX ^{WC} (per cent)
1979	98.33(44.60)	6.34	1(0.064)	0.061(0.73)	1.061(0.068)	..	..
1980	406.47(70.80)	18.34	17.59(0.79)	8.25(5.64)	25.84(1.09)	..	..
1981	799.62(79.36)	27.16	38.54(1.31)	6.92(4.42)	45.46(1.47)	..	..
1982	962.02(77.90)	37.44	50.56(1.97)	8.66(3.40)	59.22(2.10)	..	..
1983	1155.96(79.71)	35.43	61.72(1.89)	11.45(3.05)	73.17(2.01)	..	..
1984	1523.23(81.04)	36.39	92.27(2.20)	25.10(6.00)	117.37(2.55)	..	..
1985	1299.81(76.48)	33.10	77.75(1.98)	32.37(6.72)	110.12(2.50)	..	..
1986	1561.56(76.41)	33.64	115.85(2.50)	73.33(7.39)	189.18(3.36)	933.05	20.10
1987	2044.91(75.89)	36.71	178.52(3.21)	116.57(8.08)	295.09(4.21)	1339.14	24.04
1988	2499.23(75.22)	42.39	254.17(4.31)	164.23(8.12)	418.4(5.28)	1918.10	32.53
1989	3070.39(72.91)	50.48	282.124(4.64)	200.57(6.59)	482.70(5.29)	2868.88	47.16
1990	2914.08(71.17)	50.11	267.19(4.59)	223.54(7.84)	490.73(5.66)	2749.98	47.28
1991	3705.65(76.98) [3709.5](77.06)*	52.29 52.34*	358.44(5.06)	303.99(8.20) [304.6](8.17)*	662.43(6.14) [663.04](6.13)*	3553.31 [3761.29]	50.14 (53.07)*
1992	4941.06(75.44)	60.53	567(6.95)	388.84(7.61)	955.84(7.20)	4966.65	60.84
1993	475.04(72.11)	73.90	411(6.39)	344.79(6.54)	755.79(6.46)	5118.27	79.63

Notes: M^C : Hong Kong's imported woollen clothing from China

DX^{WC} : Hong Kong's total domestic export of woollen clothing

DX^C : Hong Kong's domestic export of woollen clothing to China

RX^C : Hong Kong's re-export of woollen clothing to China

TX^C : Hong Kong's total export of woollen clothing to China = DX^C + RX^C

RX : Hong Kong's re-export of woollen clothing of China origin

() : China's share in Hong Kong's total trade of the pertinent item (by value)

Sources: Census and Statistics Department, Hong Kong, *Hong Kong Trade Statistics*, various December issues; *Hong Kong Review of Overseas Trade*; for data on re-exports of woollen clothing in 1991, 1992 and 1993: compiled from unpublished data supplied by Census and Statistics Department, Hong Kong.; figures from 1979 to 1991 without [] or *; compiled from SITC data; figures for 1991 with [] or *, 1992 and 1993: compiled from Harmonised System (HS) data supplied by Census and Statistics Department of Hong Kong.

Table 7 China's shares in Hong Kong's trade of wool, woollen yarn, woollen fabrics and woollen clothing, 1979-93

	M ^T (HK\$mnn)	M ^T /DX ^{WT} (per cent)	TX ^T (HK\$mnn)	RX (HK\$mnn)	RX/DX ^{WT} (per cent)	M ^{TI} (HK\$mnn)	M ^{TI} /DX ^{WT1} (per cent)	OP ^{TI} /DX ^{WT1} (per cent)	TX ^{TI} (HK\$mnn)	RX ¹ (HK\$mnn)	RX ¹ /DX ^{WT1} (HK\$mnn)	MR ^{TI} (HK\$mnn)
1979	165.01(13.65)	10.25	33.68(1.92)	..	..	161.86(14.56)	10.08	..	33.17(1.95)	..	..	..
1980	539.33(24.39)	22.93	383.79(12.93)	..	..	537.67(24.95)	22.91	..	382.41(13.13)	..	..	..
1981	943.83(42.98)	30.26	680.15(16.61)	..	..	941.96(45.25)	30.26	..	678.82(16.96)	..	..	..
1982	1124.55(40.60)	40.25	780.04(20.33)	..	..	1124.22(42.32)	40.34	..	773.45(20.77)	..	..	..
1983	1374.19(37.28)	38.43	961.32(19.68)	..	..	1373.92(38.83)	38.52	..	952.83(19.98)	..	..	..
1984	1911.67(41.83)	42.77	1305.43(21.02)	..	..	1907.27(43.09)	46.41	..	1296.81(21.27)	..	..	..
1985	1693.41(36.78)	41.10	1176.78(20.13)	..	..	1691.30(38.13)	41.15	..	1157.1(20.23)	..	..	..
1986	2107.46(36.89)	43.40	1806.52(23.59)	1216.20	25.04	2106.69(40.04)	43.44	..	1527.63(21.04)	1215.38	25.07	891.31
1987	3029.65(41.73)	51.98	2161.99(22.85)	1851.18	31.76	3026.99(44.22)	52.05	..	1908.64(21.02)	1850.39	31.82	1176.6
1988	4187.74(47.29)	68.10	2501.50(22.67)	2743.32	44.61	3855.01(45.50)	62.77	..	2298.16(21.44)	2741.70	44.64	1113.31
1989	4677.79(47.08)	73.63	2732.31(22.01)	3757.35	59.15	4420.44(45.85)	69.67	43.61	2561.37(21.62)	3750.53	59.11	669.91
1990	4088.74(48.52)	67.37	2399.51(21.35)	3609.38	59.47	3965.66(48.03)	65.38	45.15	2318.27(21.17)	3597.28	59.31	368.38
1991	5391.92(51.66)	73.42	3279.90(23.25)	4716.23	64.22	5384.41(52.75)	73.36	48.41	3159.13(22.74)	4702.33	62.81	682.08
	[5395.77](51.70)*	73.48*	[3288.23](23.27)*	[4910.31]	66.87*	[5388.26](52.78)*	73.41*		[3159.74](22.71)*	[4910.31]	64.07*	477.95*
1992	7241.68(52.03)	86.40	4440.58(25.05)	6554.96	78.20	7230.55(54.52)	86.34	56.08	4102.48(23.98)	6523.35	77.89	707.2
1993	6417.57(49.49)	96.88	4555.28(28.26)	6569.41	99.18	6408.55(51.53)	96.82	66.48	4098.46(26.34)	6554.15	99.02	..145.6

Notes: M^C : Hong Kong's imported woollen clothing from China; DX^{WC} : Hong Kong's total domestic export of woollen clothing; DX^C : Hong Kong's domestic export of woollen clothing to China; RX^C : Hong Kong's re-export of woollen clothing to China; TX^C : Hong Kong's total export of woollen clothing to China = DX^C + RX^C; RX : Hong Kong's re-export of woollen clothing of China origin; WT : trade value of wool, woollen yarn, woollen fabrics and woollen clothing combined; WT1 : trade value of wool tops, woollen yarn, woollen fabrics and woollen clothing combined; OP^{TI} : estimated value of Hong Kong-involved outward processing trade with China on WT1 = (S_TM^{NC1} + S_CM^C) where M^{NC1}, S_T and M^C are as in Table 5 and Table 6; S_C is the proportion of the value of Hong Kong-involved outward processing trade with China on clothing in the value of Hong Kong's import of clothing from China; () : China's share in Hong Kong's total trade of the pertinent item (by value)

Sources: Census and Statistics Department, Hong Kong, *Hong Kong Trade Statistics*, various December issues; *Hong Kong Review of Overseas Trade*; for data on re-exports of woollen clothing in 1991, 1992 and 1993: compiled from unpublished data supplied by Census and Statistics Department, Hong Kong.; figures from 1979 to 1991 without [] or *; compiled from SITC data; figures for 1991 with [] or *, 1992 and 1993: compiled from Harmonised System (HS) data supplied by Census and Statistics Department of Hong Kong.

Relative to that of wool, woollen yarn and fabrics, the value of Hong Kong's imports and re-exports of woollen clothing originating from China have been much larger. In general, imports and re-exports of woollen clothing of Chinese origin contributed to over 70 per cent of the total trade value of wool and woollen products between Hong Kong and China. In 1993, for instance, Hong Kong's total value of wool, woollen yarn and fabrics and woollen clothing imported from China amounted to HK\$6417.6 million, of which woollen clothing alone accounted for 74.02 per cent of the total. In the same year, Hong Kong's re-export of woollen clothing originated from China valued HK\$5118.27 million, contributing to 77.91 per cent of Hong Kong's total re-exports of wool and woollen products of Chinese origin.

The value of woollen clothing exports to China before 1986 was smaller than that of wool, woollen yarn and fabrics but the trend has been reversed since 1989. In 1993, the value of woollen clothing contributed to 69.34 per cent of Hong Kong's total domestic exports of wool and woollen products to China. On the other hand, owing to the small size of re-exports to China, the value of woollen clothing constituted a small proportion of Hong Kong's total exports of wool and woollen products to China in the past fifteen years. Although the corresponding share of woollen clothing did experience some increases after 1985, it was still small, peaking in 1992 at 21.53 per cent.

Wool, woollen yarn, woollen fabrics and woollen clothing combined

During 1979 and 1993, owing to the small size of woollen clothing exports to China, the percentage share of total exports to China in Hong Kong's total exports of wool and wool products remained small, with a maximum of 28.26 per cent in 1993 (Table 7). The corresponding share for domestic exports was even smaller with the largest recorded in 1992 (9.72 per cent). Nevertheless, re-exports of Chinese origin accounted for more than 95 per cent of Hong Kong's total re-exports of woollen clothing during 1991-93. For wool, woollen yarn and fabrics and woollen clothing combined, the value of Chinese products still contributed to over 69 per cent of Hong Kong's total re-exports during the same period. Obviously, China should have been a major supply source of Hong Kong's imported wool and woollen products. The value of wool, woollen yarn, woollen fabrics and woollen clothing imported from China to Hong Kong increased from HK\$165.01 million in 1979 to HK\$6417.57 million in 1993, growing at an average annual rate of 29.89 per cent, much higher than that of Hong Kong's total imports (17.57 per cent). As a result, the share of imports from China in Hong Kong's total imports of wool and woollen products surged up from 13.65 per cent in 1979 to 41.83 per cent in 1984 and then to over 50 per cent during 1991-93. Hong Kong has imported relatively more of woollen clothing from China than from all import sources, and until 1993, Hong Kong's import value of wool, woollen raw materials and semi-manufactures still exceeded that of woollen clothing.

In short, after fifteen years of development and changes, China currently purchases over 25 per cent of Hong Kong's total exports, supplies more than 55 per cent of Hong Kong's total imports and about 70 per cent of Hong Kong's re-exports of wool, woollen yarn, woollen fabrics and woollen clothing. China's role as a supply source of imports and re-exports of woollen clothing has been particularly important, contributing to over 75 per cent and 90 per cent of Hong Kong's import and re-export value of woollen clothing respectively.

The impact of the 'China connection' after 1978

The 'China connection' could have affected Hong Kong's production and trade of woollen products via its direct and indirect impacts on Hong Kong's production cost and its influence on demand (both domestic and overseas) for Hong Kong's woollen product. The magnitude of the impact and the channel through which the impact operates depend mainly on China's trade policy. Before 1978, the Soviet-type trade policy reigned in China under which foreign economic relations were practically restricted to merchandise trade which was import-based and was arranged according to the guiding principle that import was to remedy defects of domestic production, to enhance self-sufficiency of the national economy and to foster economic development, while export was to finance import payment. Adhering to such a trade policy and subject to severe foreign exchange constraint, China would not spare scarce hard currencies to import finished woollen goods from Hong Kong which China could produce by itself. Instead, it imported relatively more wool, woollen yarn, woollen fabrics and other semi-manufactures for manufacture of woollen clothing and finished piece-goods for export. However, China's share in Hong Kong's total exports of woollen products remained small. In 1979, total exports to China amounted to HK\$32.62 million accounting for 16.8 per cent of Hong Kong's total export value of wool, woollen yarn and woollen fabrics. Including woollen clothing, China's share declined to 1.92 per cent because exports of woollen clothing to China only accounted for 0.068 per cent of Hong Kong's total export value of woollen clothing in 1979. Before 1979, the 'China connection' had played practically no role in relaxing the demand constraint binding the growth of Hong Kong's woollen products.

Subject to the need to secure hard currencies for financing imports of capital goods, industrial raw materials and cereals from the West, China exported a lot of wage goods, minerals, (agricultural) raw materials and consumer goods to Hong Kong at relatively low prices. Reliable and adequate supplies of cheap wage goods and other consumer goods from China have stabilised and lowered Hong Kong's living costs and wage increases which helped to preserve the price competitiveness of Hong Kong exports. Import of raw materials from China at prices lower than the international level reduced

the cost of material consumption for production in Hong Kong. On the other hand, China's export of consumer goods to Hong Kong might seize part of Hong Kong's domestic market, but in the longer run might press Hong Kong entrepreneurs to diversify and upgrade their production activities which enhanced efficiency growth. Indeed, before 1979, the impact of the 'China connection' on Hong Kong industries was primarily generated from the import side—import of wage goods, raw materials and semi-manufactures at low prices from China³. It held true for the woollen product industry as well. For instance, in 1979, total imports of woollen products from China amounted to HK\$165.05 million (much larger than that of Hong Kong's total exports of HK\$33.683 million), of which woollen clothing accounted for HK\$98.33 million or 59.59 per cent of the total (Tables 6 and 7).

With China's pursuit of open-door policy since 1979, the form and the impact of the 'China connection' on Hong Kong's economy have changed significantly. The Chinese authority hails the extension of foreign economic relations (in whatever form) as an engine of economic growth. Thus, in addition to merchandise trade, invisible trade and foreign investment, in particular are welcome. Various regions and activities have been opened for foreign investment, and tax concessions and preferential policies have been granted to foreign investors. In addition to the traditional cost-saving role of merchandise trade via investment in China, Hong Kong could directly make use of the cheap productive factors on the mainland to lower production cost.

Notably, the average wage rate (even after making due adjustment for productivity differentials) in the Pearl River delta area is less than that in Hong Kong (Liu et al. 1992). The average rental of land use and the supply prices of some regional-specific inputs are much lower. There are also innovations and technologies of huge potential commercial value which can be supplied at low cost. Moreover, employment laws and environmental protection laws in China are more 'lenient' (from the view-point of entrepreneurs), have plenty of loopholes and are always negotiable to the benefit of the foreign investors. Finally, under various tax concession schemes, the effective tax rates for foreign-involved undertakings are low, are always subject to negotiation and can easily be exempted in China (Hong Kong Government Industry Department, 1992). Comparing the costs of clothing manufacturing in Hong Kong, Taiwan, Korea, Singapore, Malaysia, Philippines, Indonesia and Thailand, it was found that the total cost of manufacturing and more importantly, the total cost per standard allowed hour (which accounts for differences in productivity) in China were the lowest (Hong Kong Government Industry Department 1992). In comparison with Hong Kong, the wage costs, overhead costs, total cost of manufacturing and total cost per standard allowed hour for clothing manufacturing in China were equivalent to 8.62 per cent, 42.59 per cent, 25 per cent and 42.5 per cent of the corresponding cost in Hong Kong respectively. The wage cost in China for textile manufacturing was only about 8.2 per cent of that in Hong Kong.

On the demand side, with relatively more rapid increase of the Chinese population's purchasing power, the relaxation of China's foreign exchange constraint due to huge inflow of foreign exchanges from non-merchandise trade sources, as well as the gradual relaxation of import control and domestic market sales by foreign-involved enterprises operating in China, accompanied by partial liberalisation of foreign exchange transaction, the China market has grown rapidly and become increasingly important to overseas investors. In fact, by forming joint-ventures with China's enterprises or authorities, foreign investors could make use of the export quotas allotted to the Chinese side by the importing economies (in addition to their own) for products under trade restrictions. Furthermore, making use of the 'relations' of the Chinese partner, the foreign investors could be better accessible to the markets of those countries with which the Chinese partner has close relation. By utilising the investment opportunities, the post-1978 China connection has been much more effective in easing the demand constraint faced by Hong Kong industrialists.

Despite the many problems in existence and many complaints alleged (by foreign investors), such as administrative red-tape, inadequate infrastructure, loose work discipline, frequent changes in laws and regulations which are ambiguous, deterioration of public order and levy of unexpected and even illegal fees and payments to the discretion of local officials, in the face of continual rising labour and rental costs as well as the emergence and strengthening of low-cost competitors from less-developed economies, it is still highly advisable for most factories in Hong Kong to relocate some or even the whole of their production activities to China. The rate of return for industrial investment in China has been generally higher than that in Hong Kong and Southeast Asian economies.

Production relocation to China

Relocation of production to China may assume various forms: indirectly through sub-contracting part or the whole of production activities to production units in the mainland or via compensation trade and other contractual arrangements which do not necessarily result in the creation of a new legal entity for administration; or directly via operating enterprises, conducting production under their administration with or without partners from the Chinese side. The indirect way is less risky because it does not require Hong Kong investors to participate directly in the management of the unit in China but it gives up all possible rent earned from direct enterprise administration. On the contrary, direct operation and management of enterprises in China involve higher risks but could yield much higher return. Before the mid-1980s, Hong Kong's relocation of industrial production to China mainly assumed the indirect form, for

instance, via compensation trade. Large-scaled direct relocation of industrial production to China has occurred since 1986.

Currently, Hong Kong-involved enterprises in China employ more than three million native workers for manufacture of industrial products much more than what the whole manufacturing industry in Hong Kong employs (less than 600,000). Exports from Hong Kong-involved production activities in China exceed Hong Kong's domestic exports. Some Hong Kong industrialists shut down all of their production plants in Hong Kong and relocated all production activities to China and let Hong Kong serve as the administrative centre for sourcing inputs, dissemination of information, testing and marketing products exported from the production base in China. Some retain part of the production process (usually the relatively capital and technology-intensive part) in Hong Kong and move the relatively labour and (or) resource-intensive part to China. Finally, some retain a small number of plants in Hong Kong to meet urgent and special demands and (or) for precaution against any shortfalls of production in China.

As China is still subject to foreign exchange constraint (Renminbi is not freely convertible), Hong Kong-involved enterprises in China are required to export a predominant proportion of their output. Most of these goods are simply processing of semi-manufactures and assembling of various component parts into finished goods with a lot of labour input. The raw materials, semi-manufactures, component parts and product designs are mainly imported (via Hong Kong first), because China itself is short of them. Furthermore, owing to inadequate supplies of communication and transportation facilities and other commercial and financial services in China, a majority of goods from Hong Kong-involved enterprises have to be exported via Hong Kong for subsequent re-export to their final destinations.

The mushroom of outward processing and other investment activities in China has triggered a series of changes for the Hong Kong economy. It has accelerated Hong Kong's de-industrialisation to the advantage of the service sector. The share of manufacturing employment in total employment decreased from 47 per cent in 1980 to around 24 per cent in 1992. Employment in the manufacturing sector was about 587,300 in 1992 which was 37 per cent lower than the corresponding figure in 1980 (926,700). During the same period employment in the wearing apparel (except footwear) and the textiles industry decreased from 25,400 to 159,400 by 37.3 per cent and from 132,700 to 88,800 by 33.1 per cent respectively. It reduced not only the size of manufacturing employment but also the per establishment employment size (from 21 in 1981 to 15 in 1991) as well as the share of operative employees in total manufacturing employment (from 88 per cent in 1981 to 78.9 per cent in 1991) (*Hong Kong Monthly Digest of Statistics*, 1993). It raised profits and so national income for Hong Kong but at the expense of workers working for labour-intensive industries in Hong Kong (Hsueh Tien-tung and Woo Tun-oy 1992). It has integrated the economies of Hong Kong and South China based on regional division of labour according to comparative advantages.

Thus it has brought about quite substantial changes in the output and export composition of the manufacturing industry in Hong Kong. In general, those industries which have energetically participated in production relocation to China experience decrease in their output and export share (all manufacturing industries) such as the plastics, watches and clocks, electrical appliances and electronic toys and particularly, radio, television and communication equipment industries. On the other hand, industries which mainly serve local interests of Hong Kong have expanded more rapidly, such as the printing industry. Industries which are subject to trade restrictions and so could not make full use of the 'relocation opportunities' such as the clothing and textile industries have suffered.

Massive production relocation to China has affected the volume and the pattern of Hong Kong's merchandise trade tremendously. Hong Kong-China trade has increased dramatically, becoming each other's largest trade partner. Hong Kong's re-report trade with China experienced the most spectacular growth. Since 1989, Hong Kong-China trade has been dominated by outward processing activities in China. Thus, a large proportion of Hong Kong-China trade is to serve the needs of the third party. Furthermore, unlike the pre-1979 pattern of trade between Hong Kong and China under which the import structure (especially that of China's imports from Hong Kong) was substantially different from that of exports (China's exports to Hong Kong), since the mid-1980s, the compositions of export and import trade between Hong Kong and China have been increasingly similar—concentrating on semi-manufactures and finished products of labour-intensive consumer goods. Note that, the rapid growth of Hong Kong's exports resulting from production relocation to China has aroused anxiety of special attention from some overseas economies, especially the United States. They introduced new measures to restrict the extent and scope of Hong Kong's using production relocation to China for some specific merchandise so as to protect their domestic markets. Such policies have triggered responses from the concerned industries such as accelerating production automation. As a matter of fact, since most of the products of Hong Kong-involved enterprises in China are exported ultimately to developed economies, trade policies of the developed economies have still played a very crucial role (from the demand side) in determining Hong Kong's industrial and trade performance. Similarly, with increasing integration of the economies of Hong Kong and South China, the trade policies of overseas economies on China could generate some substantial impacts on the Hong Kong economy. Finally, the advantages for Hong Kong to relocate production activities to China and the impact of competition from China's native production units depend primarily on China's trade policies especially those preferential policies for attraction of foreign investment.

In short, in the post-1978 period, Hong Kong's investment in China, mainly in the form of outward processing activities, replaced merchandise trade (particularly Hong Kong's imports from China), as the most important of the China connections in shaping

Hong Kong's industrial and trade performance. In fact, recently, the value of Hong Kong's imports and (especially) re-exports related to outward processing activities in China far exceeded that of Hong Kong's total retained imports. In 1993, imports from China and re-exports of China origin related to outward processing activities in China valued HK\$295,203 million and HK\$364,536 million respectively, larger than that of Hong Kong's total retained imports (HK\$249,373 million) in the same year. The most substantial changes since 1979 have primarily been brought about by the increase in the size and changes in the form of production relocation of woollen products from Hong Kong to China.

The extent of relocation

Since statistical data on Hong Kong's direct investment and administration of woollen goods production in China are not available or at best highly inadequate, we have to make some estimates of the extent of production relocation based on figures concerning woollen product trade between Hong Kong and China as well as the results of the surveys conducted by the Census and Statistics Department of Hong Kong on Hong Kong's outward processing trade with China and in addition, the survey conducted by the Trade Development Council of Hong Kong on triangular trade managed by Hong Kong investors in China (Hong Kong Trade Development Council 1991). Different ratios are compiled using Hong Kong's domestic export level of the concerned woollen product as the denominator (or the basis for comparison). The ratios for the concerned product include: imports from China to Hong Kong's domestic export level (M_c/DX), re-exports of China origin to Hong Kong's domestic export level (RX_{oc}/DX), the value of Hong Kong's outward processing operations in China to Hong Kong's domestic export level (OP_c/DX), and finally the value of Hong Kong's outward processing operations in China plus the value of Hong Kong-controlled triangular trade in China to Hong Kong's domestic export level (OP_c+T_c/DX). They are used as indicators measuring the extent of production relocation to China. The underlying assumptions are that the value of domestic export of woollen products is a good proxy of domestic output value of the same products in Hong Kong, that most of Hong Kong-controlled products turned out in China are exported to Hong Kong, that most of imports from China are re-exported via Hong Kong and the retained import ratio (retained imports as a proportion of total imports) is stable, and finally, most of imports from China or re-exports originated from China are controlled by Hong Kong investors.

The above ratios, especially the two (M_c/DX) and (RX_{oc}/DX), could not be good indicators for assessing the extent of Hong Kong's (direct) production relocation of woollen yarn and woollen fabrics to China, because domestic exports usually constitute only a small proportion of Hong Kong's domestic output. According to the law of comparative advantage China should have larger advantages in the manufacture of woollen clothing from imported woollen raw materials and semi-manufacturers rather

than in processing of raw wool and manufacture of woollen semi-manufactures for exports. The prediction is justified by the results of the surveys on Hong Kong's outward processing trade with China. Hong Kong's involvement in production of woollen intermediate inputs in China has not been substantial. In fact, in recent years, Hong Kong's domestic export of woollen yarn usually accounted for 30-50 per cent of the domestic output. Similarly, in 1993, the value of Hong Kong-related outward processing trade of textile materials, yarn and fabrics amounted only to 27.3 per cent of the value of Hong Kong's imported textile yarn and fabrics from China. Thus, the ratios (Mc/DX), (RXoc/DX) and (OPc/DX) compiled for woollen yarn and fabrics overstate the extent of Hong Kong's relocation of woollen yarn and fabrics production to Hong Kong. The ratio (RXoc/DX) for woollen yarn (including wool tops) and fabrics rose from 136.44 per cent in 1986 to 751.63 per cent in 1993 while (OPc/DX) for the same products surged up from 65.88 per cent in 1989 to 237.01 per cent in 1993 (Table 5). These ratios have increased markedly since 1988 when production relocation to China accelerated. This could not be simply explained by the decrease in the ratio of domestic exports to domestic output because re-exports of China origin did increase spectacularly after 1987. Applying the ratio of the value of Hong Kong-related outward processing trade of textile yarn and fabrics with China to that of imported textile yarn and fabrics from China, it can be shown that the value of Hong Kong-involved outward processing trade with China increased from HK\$172.81 million in 1989 to HK\$526.58 million in 1992 (by 204.72 per cent) (Table 5). As a matter of fact, Hong Kong's domestic output value of woollen yarn in 1991 was HK\$519.5 million, lower than that in 1989 (HK\$551.06 million), while the domestic export value of woollen yarn in 1991 was HK\$33.2 million, smaller than that in 1989 (HK\$72.028 million) as well. On the other hand, the estimated value of Hong Kong-involved outward processing of woollen yarn and fabrics with China in 1991 doubled that in 1989. Thus, if there were no drastic decrease in the domestic export ratio (domestic export/domestic output) of Hong Kong's woollen fabrics output (by more than 50 per cent), Hong Kong's relocation of production of woollen yarn and fabrics to China relative to its domestic production should have increased after 1989. Nevertheless, in case we replace the domestic export value by domestic output value the degree of Hong Kong's relocation of woollen yarn and fabrics to China would be reduced by at least 50 per cent during 1989-93.

On the other hand, the above ratios are much more appropriate to be used for measuring the extent of Hong Kong's direct relocation of woollen clothing production to China. In general, over 90 per cent of the domestic output (by value) of woollen clothing is exported. Furthermore, over 80 per cent of the value of Hong Kong's imported clothing from China, or re-exports of China origin are originated from Hong Kong-related outward processing trade of clothing with China, which may be used as a proxy for woollen clothing. The ratio (Mc/DX) surged up from 6.34 per cent in 1979 to over 36 per cent during 1982-84 and dropped to about 33 per cent in 1985 and 1986

(Table 6). It rebounded in 1987 and increased substantially since 1988 to reach the peak (73.9 per cent) in 1993. The ratio (RXoc/DX) has increased rapidly since 1988. In 1993 it was 79.63 per cent, much higher than that in 1986 (20.1 per cent). Finally, calculated on the basis of imports from China, the ratio (OPc/DX) increased from 42.65 per cent in 1989 to 61.41 per cent in 1983. On the basis of the value of re-exports of China origin⁴, the corresponding ratio (OPc/DX) rose from 45.38 per cent in 1991 to 68.32 per cent in 1993. In order to account for the profit margin of Hong Kong's domestic exports, on top of the average purchase cost of the exportable, the ratio compiled on the basis of the value of imports from China should be adjusted upward by 20 per cent or more⁵. Combining woollen clothing with woollen yarn and woollen fabrics, both ratios (Mc/DX) and (RXoc/DX) follow a similar pattern of that of woollen clothing alone but are of larger size. In 1993, (Mc/DX) was 96.82 per cent while (RXoc/DX) reached 99.02 per cent. At the same time, the value of Hong Kong-involved outward processing trade with China was equivalent to 66.48 per cent of Hong Kong's domestic exports while the corresponding ratio was only 43.61 per cent in 1989.

Not all of the outputs of China origin related to Hong Kong direct investment are exported to Hong Kong (either to meet the consumption needs of Hong Kong citizens or for re-export to other destinations). Some are retained in China for consumption and others are exported directly to overseas markets other than Hong Kong (the so-called triangular trade run by Hong Kong investors) all of which are not recorded in Hong Kong's trade statistics. Subject to the foreign exchange constraint, the Chinese authority has restricted domestic sales of the output of foreign-involved enterprises in China. For woollen products especially woollen clothing which are not strategic, high-technology products, the upper limit of the domestic sales ratio of foreign-involved enterprises is used to be very small. As a matter of fact, subject to the need to balance foreign exchanges transaction and in view of the relatively low purchasing power of the Chinese population (especially before 1991), the foreign-involved enterprises were most eager to export their products especially the consumer goods to overseas markets to earn foreign exchanges. As for triangular trade, no comprehensive statistical data are readily available. Nevertheless, in 1991, about 86 per cent of the total sales value of goods sourced from China by Hong Kong manufacturing and trading companies were exported via Hong Kong to other destinations (Hong Kong Trade Development Council, 1991). The corresponding ratio in 1988 was 82 per cent. In 1991, the direct export share (the percentage share of the value of goods directly exported from China to destinations other than Hong Kong in China's total exports) of clothing sourced from China by Hong Kong companies was 19 per cent; higher than that for all merchandise (14 per cent) because quite a substantial proportion of the sourced clothing was produced in North China, far away from China. Furthermore, the value of triangular trade could amount to 50 per cent of Hong Kong's re-export trade. Applying the direct export share of clothing sourced from China (19 per cent)⁶, we find that the exported output

value of woollen clothing generated by Hong Kong-involved enterprises in China (which include the value of re-exports of China origin related to Hong Kong-involved outward processing operations in China plus the value of triangular trade for woollen clothing) accounted for 52.93 per cent (compiled based on SITC statistics) or 56.01 per cent (based on Harmonised System (HS) trade statistics) of Hong Kong's domestic exports value of woollen clothing in 1991. However, if the above ratio of triangular trade to total re-export trade (50 per cent) is employed⁷, the corresponding percentage share amounted to 64.31 per cent or 68.06 per cent. In case the same exercise is applied for 1993, the corresponding share should be 84.35 per cent (based on HS statistics and the direct export share of clothing) or 102.48 per cent (based on HS statistics and the share of triangular trade in Hong Kong's re-export trade). Similarly, we may compile the value of triangular trade of woollen yarn and fabrics related to Hong Kong's outward processing operations in China. It is believed that in future, with the relaxation of foreign exchange constraint and accordingly the domestic sales ratio of foreign-involved enterprises in China as well as the improvement of communication, transportation facilities, financial and other business services in China, the downward bias of Hong Kong's re-exports of China origin as an estimate of the activity level of Hong Kong-involved woollen goods production in China would be more severe.

To complete the study on the export value of Hong Kong-involved production of woollen goods in China, we add up the estimated value of Hong Kong's imported Chinese woollen clothing related to Hong Kong-involved outward processing operations in China and the estimated value of triangular trade. The resultant estimated values based on the 19 per cent direct export share for 1991, 1992 and 1993 (in HK\$ million) are 4390.83, 5798.57 and 5432.17 respectively. The estimates based on the 50 per cent triangular trade ratio are 5334.86, 7045.26 and 6600.083. In case adjustment for inclusion of re-export profit margin is taken into account, the estimated values (in HK\$ million) are 5227.18, 6903.06 and 6466.87 respectively if the direct export ratio (19 per cent) is used⁸, or 6351.02, 8387.21 and 7857.24 respectively in case the triangular trade ratio (50 per cent) is employed⁹. After taking into account the profit margin of re-export trade, the estimated percentage share of the total export value of Hong Kong-involved production of woollen goods in China in Hong Kong's domestic exports of woollen goods in 1991, 1992 and 1993 should be 71.22 per cent, 82.42 per cent and 97.70 per cent respectively when the (19 per cent) direct export ratio is applied, or 86.53 per cent, 100.15 per cent and 118.71 per cent respectively if the (50 per cent) triangular trade ratio is used. Thus, including domestic sales in China, most likely, in 1993, the total output value created by Hong Kong-involved investment in the production of woollen goods in China should have been larger than that of Hong Kong domestic value.

Table 8 Percentage shares of imported Chinese uncompleted woollen garments** in Hong Kong's woollen clothing trade, 1979-93

	M^G (HK\$mn)	M^G/M^C (per cent)	M/RX (per cent)	WC_{IG} (HK\$mn)	WC_{IG}/DX^{WC} (per cent)
1979	9.82	9.99	155.27-155.66 ⁺	14.99-15.02 ⁺	0.97 ⁺
1980	117.90	29.01	99.52-103.23 ⁺	174.18-180.67 ⁺	7.86-8.15 ⁺
1981	438.45	54.83	354.67-358.08 ⁺	664.97-671.38 ⁺	22.59-22.81 ⁺
1982	546.09	56.77	275.41-278.31 ⁺	870.48-879.65 ⁺	33.88-34.24 ⁺
1983	668.08	57.99	230.23-231.04 ⁺	1010.48-1014.03 ⁺	30.97-31.08 ⁺
1984	864.00	56.72	269.70-270.38 ⁺	1307.03-1310.31 ⁺	31.22-31.30 ⁺
1985	600.28	46.18	162.44-163.0 ⁺	962.34-965.66 ⁺	24.51-24.59 ⁺
1986	426.68	27.32	49.92	621.34	13.39
1987	457.11	22.35	39.33	720.01	12.93
1988	42.16	1.69	2.36	60.54	1.03
1989	7.82	0.26	0.32	12.83	0.211
1990	11.50	0.39	0.47	17.52	0.301
1991	24.10	0.65	0.71	34.85	0.492
		0.48 [*]			
1992	30.93	0.63	0.54 ⁺⁺	44.73 ⁺⁺	0.548 ⁺⁺
1993	28.92	0.61	0.46 ⁺⁺	41.85 ⁺⁺	0.651 ⁺⁺

Notes: **: incompleted woollen garments include SITC 845918 and SITC 847195 before 1992; after 1991 they refer to HS61179010 and HS62179010; figures with * is compiled from data based on HS clarification; M^G : Value of Hong Kong's imported incompleted woollen garments from China; M^C : value of Hong Kong's imported woollen clothing from China; MR^G : value of imported Chinese incompleted garments retained in Hong Kong = $M^C - (RX/1+r)$ where RX is Hong Kong's re-export of incompleted woollen garments of China origin, r is the average profit margin (as a proportion of import value) for re-export of imported textiles, and clothing in Hong Kong compiled from various Surveys on Hong Kong's Wholesale and retail trades, restaurant and hotel sectors; WC_{IG} : sales value of woollen clothing manufactured from imported Chinese incompleted woollen garments; V/Fm where (V/Fm) is the ratio of the sales value of textiles and clothing to the costs of material purchases by the textiles and clothing industries, which is computed as the average of the (V/Fm) ratios of textiles (including knitting) and wearing apparel (excluding knitting) industries compiled by various issues of *Survey of Industrial Production*; DX^{WC} : Hong Kong's domestic export value of woollen clothing

+ : compiled from the estimated lower and upper limits of MR^G as exact data on RX are available only from 1986 onwards. The lower limit = $M^G - (RX^{IG}/1+r) \geq 0$ where RX^{IG} is Hong Kong's total re-export value of incompleted woollen garments. The upper limit = $M^G - (RX^{IG}/1+r) \leq M^G$ which is smaller.

++ : compiled based on r in 1991 as r is still not available for years after 1991.

Sources: Census and Statistics Department, Hong Kong, *Hong Kong Trade Statistics*, various December issues; *Hong Kong Review of Overseas Trade*; for data on re-exports of woollen clothing in 1991, 1992 and 1993: compiled from unpublished data supplied by Census and Statistics Department, Hong Kong; figures from 1979 to 1991 without *; compiled from SITC data; figures with * compiled from Harmonised System (HS) data supplied by Census and Statistics Department of Hong Kong; various issues of *Survey on Industrial Production and Survey on Wholesale and Retail Trades, Restaurant and Hotel*.

The form of relocation

In the past fifteen years, the form of Hong Kong's relocation of woollen clothing production to China had undergone fundamental changes with 1985 as the watershed. Before 1985, relocation took place mainly indirectly, via import of uncompleted woollen garments from China as semi-manufactures with the final stage of production (of finished goods) completed in Hong Kong. During this period (1979–84), Hong Kong's domestic export of woollen yarn to China increased tremendously (despite of the relatively stagnant growth of domestic output) for manufacture of semi-finished garments in China which would be exported back to Hong Kong for final processing. Such practice could save labour costs via making use of cheap labour in China while at the same time it could ensure quality control and punctual delivery of the final goods as the final stage of production was conducted in Hong Kong. As a result, during 1981–84, Hong Kong's imports of woollen clothing from China were dominated by uncompleted garments: uncomplete garments knit wool (SITC845918) and incompleated garments not knit wool (SITC847195) especially by incompleated garments knit wool. The value of imported incompleated garments from China increased dramatically from HK\$9.82 million in 1979 to HK\$864 million in 1984. The percentage share of the value of incompleated garments in Hong Kong's total imported woollen clothing from China thus increased from 9.99 per cent in 1979 to 57.79 per cent in 1983 with an average of 56.53 per cent during 1981–84 (Table 8).

Nearly all of Hong Kong's imports of incompleated woollen garments of Chinese origin were retained in Hong Kong. In 1983, retained import of Chinese incompleated garments alone accounted for 46.22 per cent of Hong Kong's total woollen clothing imports. On the other hand, the share of imported finished woollen garments, even that of the dominating items: jackets, pullovers, men's knit wool (SITC845111) and jackets, pullovers, women's knit wool (SITC845113) in Hong Kong's total imported Chinese woollen clothing declined, from 42.76 per cent in 1980 to 27.41 per cent in 1981, with an average of 29.37 per cent during 1981–84. Thus, before 1985, Hong Kong's re-export of woollen clothing was unimportant relative to its imports. Even in 1984, the value of Hong Kong's total re-exports of woollen clothing amounted to only 27.45 per cent of that of imported Chinese woollen clothing. Similarly, the value of retained import of incompleated garments from China exceeded that of Hong Kong's re-exports of total woollen clothing originated from China (Table 8). Obviously, during 1979–84, the major role of 'China connection' for Hong Kong's wool industry was to supply the industry with abundant semi-manufactures at low costs via compensation trade or other contractual arrangements in China.

The impact or the extent of Hong Kong's indirect production relocation during 1979–84 could not be accurately captured by the ratios (Mc/DX) or (RXoc/DX) discussed above, because the direct impact of such form of production relocation should

be on Hong Kong's domestic output or domestic exports rather than on re-exports of China origin. Thus, a larger positive impact generated by the pre-1985 production relocation would usually result in a smaller (RXoc/DX) ratio, if other supply and demand conditions in Hong Kong remained unchanged. A better indicator could be the ratio of the estimated sales value of woollen clothing that could be manufactured from the retained imports of Chinese incompleated woollen garments to Hong Kong's domestic export value. Table 8 shows that the retained imports of Chinese incompleated woollen garments could have contributed to over 30 per cent of Hong Kong's domestic exports value of woollen clothing with the peak (34 per cent) in 1982.

However, Hong Kong's promotion of woollen clothing exports via the above-discussed 'China connection' alarmed the United States. In August 1984, the US unilaterally imposed a much more stringent definition of the place of origin for Hong Kong's clothing exports. It demanded that in order to be eligible to allotment of export quotas to the United States in the name of product of Hong Kong origin the garments should have all the knitted pieces manufactured in Hong Kong. Although, later the rule was relaxed to permit some of the knitted pieces to be manufactured outside Hong Kong, it gave a serious blow to Hong Kong's woollen clothing manufacturers because it implied, since then, they could no longer rely mainly on import of incompleated woollen garments from China to maintain their export competitiveness. In response, the industry proceeded to accelerate production automation so as to lower labour cost through massive import of automated and computerised knitting machines. Nevertheless, Hong Kong's domestic export of woollen clothing was hit in 1985. The more important was however, that the form and thus the role of Hong Kong's production relocation of woollen clothing to China have experienced some fundamental changes since then.

The percentage share of incompleated garments in Hong Kong's total imports of woollen clothing from China declined spectacularly from 56.7 per cent in 1984 to 27.32 per cent in 1986 and further to 1.69 per cent in 1988 (Table 8). In 1993 it was 0.61 per cent. Correspondingly, the percentage share of the estimated sales value of woollen clothing that could be manufactured from imported Chinese incompleated garments in Hong Kong's domestic exports of woollen clothing slipped from 31 per cent in 1984 to 13.4 per cent in 1986 and then to 1.03 per cent in 1988. Similarly, the ratio of Hong Kong's retained import value of Chinese incompleated garments to that of woollen clothing re-exports of China origin dropped from 270 per cent in 1984 to 49.92 per cent in 1986 and then to 2.36 per cent in 1988.

All evidences indicate that since 1985, especially from 1986 onwards, the China-Hong Kong connection in Hong Kong's trade of woollen clothing has assumed a new form. Hong Kong concentrates on production of woollen clothing of high quality and of higher value added content with the whole production process undertaken and

completed in Hong Kong. Production is highly automated in order to lower labour cost. China has however been used as the base for manufacture of finished products of relatively simple design with intensive use of labour for export, mainly via Hong Kong. Accordingly, the pattern of Hong Kong-China trade in woollen goods has changed substantially. Hong Kong's domestic export of woollen yarn to China decreased remarkably after 1985 despite of some upsurge in domestic production of woollen and worsted yarn since then. After 1984, a much larger proportion of domestic products which were mainly high-quality worsted yarn were retained in Hong Kong for production of woollen clothing because Hong Kong could no longer rely predominantly on imported Chinese incompleting garments and because domestic product of yarn suited local production needs better. Hong Kong's re-export of woollen yarn to China continued to grow, in support of garment production in China. Whereas Hong Kong's domestic export of woollen yarn to China decreased from 5,239 ton in 1984 to 2,069 ton in 1993, its re-export to China increased from 16,181.5 ton to 29,127 ton respectively. With the decrease in import of incompleting garments and the increase of Hong Kong's direct investment and control of clothing production in China, the pattern of Hong Kong-China trade in woollen clothing has undergone fundamental changes since 1985. Notably, the percentage share of completed knitted clothing in Hong Kong's total woollen clothing imports from China increased from 36.87 per cent in 1984 to 65.35 per cent in 1986 and then further to 92.08 per cent in 1988. Of all knitted woollen clothing imported from China, jackets pullovers men's knit wool and jackets pullovers women's knit wool (SITC 845111 and 845113 or under the Harmonised System: 61101010 and 61101020) accounted for the lion's share. The share of item SITC 845111 and 845113 in Hong Kong's total imported Chinese woollen clothing increased from 30.11 per cent in 1984 to 52.25 per cent in 1986 and then to 84.33 per cent in 1988. The average percentage share of completed knitted clothing and SITC 845111 + 845113 during 1989-93 was 89.61 per cent and 82.68 per cent respectively. A large proportion of completed woollen clothing imported from China was re-exported.

In 1986, 80.42 per cent of the value of imported Chinese completed knitted clothing was re-exported. During 1991-93, on average, the corresponding re-export ratio was 103.22 per cent. However, note that, during 1982-84 when import of incompleting garments from China was the core of 'China connection', even if we equate re-export of China origin with Hong Kong's total re-export, the average share of re-export of China origin in Hong Kong's import of woollen clothing from China was only 28.8 per cent.

Certainly, with the improvement of China's investment environment and the decrease of the productivity gap between China and Hong Kong as well as the strict enforcement of very stringent rule governing the place of origin for Hong Kong's domestic exports while the China market is still restricted by the foreign exchange constraint, Hong Kong investors would increase the practice of regional division of

labour (between Hong Kong and Mainland China) on final product basis rather than to locate different sub-processes of the whole production process in different localities of Hong Kong and China. This is what the manufacturing industry in Hong Kong has pursued in large scale since 1988. Thus, only after 1984, especially since 1988, the ratio: Hong Kong's re-export of China origin to Hong Kong's domestic export of woollen clothing could be a good indicator for assessing Hong Kong's relocation of woollen clothing production to China. This ratio for total woollen clothing surged up from 20.1 per cent in 1986 to 32.53 per cent in 1988 and then further to 79.63 per cent in 1993. The corresponding ratio for knitted woollen clothing increased from 21.33 per cent to 35.23 per cent and then to 85.1 per cent while that for SITC 845111 and 845113 changed from 22.11 per cent to 41.1 per cent and 95.25 per cent respectively.

Production relocation: comparison with other manufacturing industries

Since 1988, there has been quite remarkable growth of production relocation by Hong Kong's wool industry to China as indicated by the upsurge of the two ratios (Mc/DX) and ($RXoc/DX$) for Hong Kong's trade of woollen products. However, in comparison with other manufacturing industries in Hong Kong, the extent of production relocation by the wool industry has been below average. Concerning wearing apparel and accessories (SITC 84) as a whole, the (Mc/DX) and ($RXoc/DX$) ratios increased from 71.5 per cent and 60.43 per cent in 1988 to 158.95 per cent and 212.53 per cent in 1993 respectively, much larger than that achieved by woollen clothing which rose from 42.39 per cent and 32.53 per cent to 73.9 per cent and 79.63 per cent respectively during the same period of time. The corresponding ratios for textile yarn, fabrics, made-up articles, (SITC 65) plus wearing apparel and clothing accessories (SITC 84) surged up from 65.68 per cent and 51.42 per cent to 123.57 per cent and 140.47 per cent respectively, also larger than that achieved by woollen yarn, wool tops, woollen fabrics and woollen clothing combined which changed from 62.77 per cent and 44.64 per cent to 96.82 per cent and 99.02 per cent respectively. Thus, the relocation of production of woollen products to China have been slower and lagged behind that of textiles and clothing as a whole.

In fact, the relocation of textiles and clothing production to China has fallen behind all manufacturing industries as a whole. The (Mc/DX) and ($RXoc/DX$) ratios for Hong Kong's total traded merchandise increased from 71.5 per cent and 60.43 per cent in 1988 to 158.95 per cent and 212.53 per cent in 1993 respectively. Besides this, based on the indicator: resales as a percentage of total sales (RS/TS) used by the Census and Statistics Department of Hong Kong, in 1991, compared with 1981, all manufacturing industries in Hong Kong did experience a higher degree of involvement in outward processing activities in China. The percentage share of resales in total sales for all manufacturing industries rose from 6 per cent in 1981 to 20 per cent in 1991. However, the corresponding shares for SITC 65 and SITC 84 in 1991 were below average, 14 per

Table 9 Resales ratio, output growth and labour intensity of selected manufacturing industries/industry groups in Hong Kong, 1981, 1991

	RS/V (per cent)		per cent	C ₁ /Y (per cent)	
	1981	1991		1981	1991
All manufacturing industries	6	20	148	18(20)	16(18)
Wearing apparel	6	16	124	23(24)	21(22)
Textiles	8	14	167	16(17)	16(17)
Printing and publishing	2	3	274	21(25)	22(27)
Paper and paper products	2	8	360	17(18)	15(17)
Plastic products	3	35	79	22(24)	18(21)
Watches and clocks, photographic and optical goods, scientific equipment	5	23	92	12(13)	10(11)
Electrical appliances and electronic toys	8	38	69	16(18)	13(15)
Radio, television and communication equipment	5	41	-11	10(11)	13(14)
Electronic parts and components	15	31	183	16(19)	19(22)

Notes: RS/V : resales ratio = resales as a percentage of total sales in the pertinent industry/industry group : percentage change in the gross output value of the pertinent industry/industry group in 1991 over that in 1981

C₁/Y : compensation of employees as a percentage of gross output

() : compensation of employees as a percentage of total production cost

Source: *Hong Kong Monthly Digest of Statistics*, 1993. 'Structural Changes in Manufacturing Industries 1981-1991', Census and Statistics Department, Hong Kong Government Printer, September:114-23.

cent and 16 per cent respectively (Table 9). On the other hand, the shares for radio, television and communication equipment, electrical appliances and electronic toys; plastic products and electronic parts and components were substantially larger than the average rate. Similarly, the (RXoc/DX) ratios for baby carriages, toys, games and sporting goods increased from 152.7 per cent in 1988 to 1354.27 per cent in 1992, household type electrical and non-electrical equipment increased from 79.34 per cent to 572.92 per cent and telecommunications equipment surged up from 13.82 per cent to 110.69 per cent respectively.

Note that in Hong Kong on average, the wearing apparel industry is relatively more labour-intensive than manufacturing industries as a whole. In 1991, compensation of employees accounted for 21 per cent of the gross output value or 22.3 per cent of the

production cost of wearing apparel; higher than that of all manufacturing industries (16 per cent of the gross output value or 18 per cent of the production cost). In the same year, the labour intensity of textiles production in Hong Kong was at par with all manufacturing industries. On the other hand, some industries with relatively small labour cost, shares have relocated their production activities to China more rapidly and to a larger extent. For instance, in 1991, the labour cost shares of radio, television and communication equipment; electrical appliances and electronic toys; and watches and clocks, photographic and optical goods, scientific equipment were 13 per cent, 13 per cent and 10 per cent of their respective gross output value; substantially lower than that of all manufacturing industries. This relationship between labour intensity and the extent of production relocation to China seems to contradict with the prediction of the Heckscher-Ohlin theorem. According to the theorem, as China is richly endowed with labour, resulting in a much lower labour cost on the mainland compared with Hong Kong, it is advantageous for Hong Kong to relocate its relatively more labour-intensive industries to China. Accordingly, the extent of production relocation of wearing apparel to China should have been larger than average, at least larger than the radio, television and communication equipment; electrical appliances and electronic toys; and watches and clocks, photographic and optical goods, scientific equipment industries. However, not only that the pattern of production relocation to China seemed to be irrational, the exports of foreign-involved enterprises in China were dominated by electrical and electronic products (accounting for 35.1 per cent of their total exports in 1992) which are commonly regarded as more capital-intensive than clothing (Almanac of China's Foreign Economic Relations and Trade, 1993). Moreover, according to a survey, on average, labour cost only accounted for 6-7 per cent of gross value of the industrial output of foreign-involved enterprises in Shenzhen in 1990 (Liu et al., 1992).

The above-discussed 'irrationality' should be attributable to two reasons. The first concerns the growth restrictions imposed on Hong Kong clothing and textiles exports by Hong Kong's major overseas markets via bilateral agreements under the MFA framework. Compared with other products especially electrical and electronic goods, Hong Kong's clothing and textiles exports particularly woollen clothing from the mid-1970s onwards have been subject to much severer growth restrictions. In 1992, 61.5 per cent of Hong Kong's domestic exports of clothing and textiles products (by value) was subject to quotas restraint.

At the same time, China's clothing and textiles exports have also been subject to increasingly severe quotas restraint levied by the developed economies in view of their spectacular growth achieved in the past decade. China would rarely permit Hong Kong investors to use its own export quotas. In addition, the overseas markets and the Hong Kong government have been strict in enforcing the rules governing the acquiring of the status of product of Hong Kong origin. Most investors regard the lack of quotas

as one of the severest barriers to profit and this inhibits the growth of investment in the clothing industries in both Hong Kong and China (Hong Kong Government Industry Department, 1992). Quota restraints on Hong Kong's textiles and clothing exports have forced Hong Kong industrialists to upgrade their products, improve design, change the output composition in accordance with the severeness of restrictions and to seek new markets so as to evade trade restrictions and raise the value-added share of output value such that despite of under quantity restrictions Hong Kong could still enjoy satisfactory growth in export value added. In fact, the unit value of Hong Kong's clothing exports especially woollen clothing exports rose faster than that of merchandise exports as a whole, although by quantity, clothing exports especially (woollen clothing) grew relatively slower in the past fifteen years. Thus, Hong Kong's domestic clothing and textiles exports have become more capital, technology and information-intensive but less standardised so that Hong Kong could still enjoy advantages in their production for overseas markets relative to the low-wage competitors from less-developed economies. Yet, Hong Kong's clothing and textile industries are still not competent enough to capture a large market share of the high-quality, high-priced clothing and fashions (which are not subject to severe trade restrictions) in the developed economies. At the same time, the simple low-priced textiles and clothing products of Hong Kong have been gradually driven out of the market due to deterioration of competitiveness, trade restrictions and stagnation of the growth of world demand. This could be more serious for the knitted woollen clothing industry because manufacture of knitted woollen garments could be very labour-intensive and conducted in a small scale, requiring little overhead investment and floor space. It is relatively easy for a labour-abundant less-developed economy to establish its own competitive knitted clothing industry provided that it could secure adequate supplies of raw materials and semi-manufactures. In fact, the local industries in China have already become Hong Kong's major competitor in the export of some knitted woollen garments in the world market. In recent years, the Chinese authorities of some relatively developed areas in China have shown their intention and proceeded to restrict production relocation of simple manufactures such as low-priced textiles and clothing products in their territories. Yet conditions in most of the low-cost areas in China are not favourable enough to induce Hong Kong industrialists to relocate the production of high-priced sophisticated manufactures to China in a large scale. Subject to all these problems, Hong Kong's relocation of clothing especially woollen clothing production to China has been severely restrained although clothing manufacturing seems to suit China's advantages.

The second reason is that most of China's exports of electrical and electronic products related to foreign investment are simply assembling of imported component parts or processing of imported semi-manufactures with labour input which require low technical knowhow and skill. Thus, although the finished products are capital-

intensive in a sense that material input costs (the costs for purchase of component parts and semi-manufactures) constitute a predominant proportion of total production cost, what have really been undertaken in China is most labour-intensive which is clearly in line with China's comparative advantage! Nevertheless, of all clothing production in Hong Kong, the manufacture of woollen clothing is more capital-intensive. Compared with the clothing industry as a whole, Hong Kong's woollen clothing exports include a much larger share of knitted outerwear (for instance SITC 845111 and 845113). The knitted outerwear industry generally yields larger value added per unit of labour, employs relatively more material inputs, invests more intensively and thus has a larger investment per labour ratio in contrast with the non-knitted outer garment and wearing apparel industries (Table 10). Furthermore, the modern machines for knitting of piece goods and so the manufacture of knitted woollen clothing are smaller in size, lighter in weight, and highly computerised which can be better adapted to the general production environment and counteract the problems—high and ever-using wage rate and rentals due to shortage in supplies of labour and factory floor area, in comparison with the manufacture of cotton clothing. As a result, the relocation of woollen clothing production to China has lagged behind the whole wearing apparel industry. Similarly, owing to the predominant share of woollen clothing, production relocation of the wool industry to China has fallen behind the whole textiles and clothing industries in Hong Kong especially since 1988.

The role of Hong Kong in China's wool trade

Hong Kong is a very important intermediary in China's wool trade. In 1992, close to 70 percent of China's exports of wool products were exported via Hong Kong to third countries and over 40 percent of China's imports of wool products were imported via Hong Kong from third countries (Table 11). While it is well known that Hong Kong is an important intermediary in China's trade in general, there are some special factors operating in the realm of woollen textiles and clothing.

Historically, the textiles industry was the largest industry in Hong Kong in the 1950s and the clothing industry surpassed the textiles industry in the mid-1960s. Hong Kong's exports of cotton textiles and clothing first came under restriction by the UK in 1958, and Hong Kong's exports of woollen textiles and clothing were restricted from 1970 onwards under the MFA (Multifibre Arrangement). As a result of the long history of restrictions, the textiles and clothing industries of Hong Kong were the first industries to invest overseas in regions that had not come under the restriction of the MFA. Hong Kong industrialists first invested in Southeast Asia and Macau, and then in far off areas such as Mauritius, Mexico, Israel, or even in the US and the EC, and then in China after its opening in 1979. The MFA hastened the globalisation of the

Table 10 Value added per labour, factor intensity and profit rate of key sectors of textiles and clothing industries: a comparison, 1984-91

	I/L	VA/L	Fm/L	C _L /C	Fm/C	π/C	I/VA
1984							
Knit outerwear	4.46	60.01	157.59	16.6	73.0	11.20	7.43
Outer garments (except knitwear)	2.01	44.35	77.00	27.2	62.3	8.71	4.53
Wearing apparel (except footwear)	2.11	44.43	86.04	25.2	65.0	8.40	4.75
Textiles	5.54	63.98	173.84	15.8	75.0	11.80	8.66
1986							
Knit outerwear	10.00	68.30	201.73	16.1	74.5	9.11	14.64
Outer garments (except knitwear)	2.60	51.58	93.01	27.3	63.1	7.66	5.04
Wearing apparel (except footwear)	3.26	51.48	103.30	25.4	65.6	7.27	6.33
Textiles	15.14	82.51	209.04	16.7	74.6	12.70	18.30
1988							
Knit outerwear	7.54	89.65	200.64	18.14	72.39	11.27	8.40
Outer garments (except knitwear)	7.09	69.97	139.22	24.62	65.49	8.30	10.13
Wearing apparel (except footwear)	7.16	70.70	150.47	23.06	67.22	8.52	10.13
Textiles	12.26	103.94	251.81	17.79	72.87	12.29	11.80
1989							
Knit outerwear	9.57	98.00	283.15	16.4	72.9	8.83	9.77
Outer garments (except knitwear)	3.42	77.21	138.70	26.4	63.0	8.62	4.43
Wearing apparel (except footwear)	3.46	81.09	158.89	23.8	65.6	9.68	4.27
Textiles	16.56	113.38	289.90	17.3	72.2	11.00	14.60
1990							
Knit outerwear	9.51	115.65	281.52	18.3	69.7	10.30	8.22
Outer garments (except knitwear)	5.49	84.46	171.47	23.7	65.3	8.49	6.49
Wearing apparel (except footwear)	6.41	85.67	179.12	23.0	66.2	8.63	7.48
Textiles	14.67	112.79	292.37	18.7	69.8	11.10	11.80
1991							
Knit outerwear	13.30	120.00	400.97	14.5	74.2	7.70	11.10
Outer garments (except knitwear)	7.77	98.54	211.04	22.0	66.1	8.87	7.88
Wearing apparel (except footwear)	7.21	98.26	212.74	21.8	66.4	8.81	7.34
Textiles	18.25	141.17	358.58	17.2	71.5	11.00	12.90

Notes: I/L: gross additions to fixed assets/number of persons engaged (HK\$'000)

VA/L: value added per person engaged (HK\$'000)

Fm/L: purchases of materials, supplies and industrial work/services per person engaged (HK\$'000)

C_L/C: compensation of employees as a percentage of total cost

Fm/C: material purchase cost as a percentage of total cost

π/C: gross profit as a percentage of total cost

I/VA: gross additions to fixed assets as a percentage of value added of production

Source: Census and Statistics Department, *Survey on Industrial Production*, Hong Kong Government

Printer, various issues.

textiles and clothing industries in Hong Kong. The industries are co-ordinated from their Hong Kong headquarters, sourcing materials all over the world, producing products in the most economical locations, and selling the output in the world market. Hong Kong, with its experience in both marketing and sourcing supplies for the textiles industry, naturally becomes a prominent trading centre in textiles and clothing. Hong Kong firms import Chinese yarn and fabric in bulk, distributing these to their subsidiaries in Southeast Asia, or import yarn and fabric from non-Chinese sources, and distribute these to subsidiaries in China.

China is clearly a net importer of wool and woollen yarn and tops (Table 11). China was a net exporter of woollen fabrics from 1986 to 1991, but a net importer in 1992.

Table 11 **China's wool trade and the role of Hong Kong (US\$m)**

	1986	1987	1988	1989	1990	1991	1992
Wool							
Imports	493(7.6)	544(6.2)	896(3.1)	535(4.3)	146(7.8)	351(4.7)	556(7.9)
Exports	11(0.92)	60(0.17)	120(0.17)	7(13.4)	9(16.5)	7(26.3)	11(38.4)
Yarn & Tops							
Imports	192(73.4)	184(92.4)	309(66.3)	360(63.8)	207(90.4)	308(83.7)	468(72.0)
Exports	37(73.2)	87(56.6)	123(65.1)	130(72.1)	100(86.1)	165(71.7)	247(66.6)
Fabric							
Imports	38(20.7)	34(28.8)	40(27.8)	49(27.6)	57(37.2)	70(49.3)	155(33.3)
Exports	47(19.6)	71(22.5)	100(25.2)	74(26.4)	59(38.9)	76(38.9)	118(30.8)
Sub-total							
Imports	724(25.8)	762(28.0)	1,246(19.6)	943(28.2)	410(53.6)	728(42.4)	1,180(36.7)
Exports	95(38.1)	219(30.0)	343(30.8)	210(54.2)	168(65.6)	248(60.3)	376(54.6)
Clothing							
Imports	..	..	..	..	..	..	21(237.8)
Exports	..	..	..	..	..	..	1,086(74.5)
Total							
Imports	..	..	..	..	..	..	1,201(40.2)
Exports	..	..	..	..	..	..	1,462(69.4)

Notes: Figures in brackets represent the percentage shares of China's imports (exports) via Hong Kong from/to third countries. China's imports via Hong Kong from third countries are taken to be Hong Kong's re-exports of third-country goods to China, and China's exports via Hong Kong to third countries are taken to be Hong Kong's re-exports of China origin.

Sources: Chinese data: *China Customs Statistics*; Hong Kong data: Census and Statistics Department, Hong Kong Government.

China was definitely a net exporter of woollen clothing. China thus processes imported wool or yarn into fabrics and clothing for exports.

Several caveats are in order. Firstly, the data start from 1986 because that was the first year for which fairly detailed trade statistics of China were available. Four-digit SITC (Standard International Trade Classification) statistics were available for 1986, and five-digit SITC statistics were available from 1987 till 1991. The available statistics for 1986 to 1991 were adequate for ascertaining China's trade in wool (greasy and scoured), woollen yarn and tops, and woollen fabrics, but they were not fine enough for ascertaining China's trade in woollen clothing, and woollen made-up textiles such as carpets and blankets. From 1992 onwards, China changed to the Harmonised System (HS), and 8 digit HS data became available, and these data were fine enough for ascertaining China's trade in woollen clothing.

The second caveat pertains to the bias in the commodity composition of China's trade before 1992. From 1985 to 1991, China classified its substantial trade involving processing/ assembling operations in division 9 of the SITC (commodities not classified elsewhere). The bulk of these trade consisted of textiles and clothing (including items of wool), electronic products and toys. As China's trade involving processing/ assembling operations accounted for around 15 percent of China's trade in the period, China's trade in the above products as obtained from Chinese statistics were biased downwards. However, China's trade in these products with third countries via Hong Kong were obtained from Hong Kong statistics and such a bias does not exist. The share of China's imports (exports) via Hong Kong from (to) third countries were thus biased upwards from 1986 to 1991. From 1992 onwards, China switched to the HS system and China's trade involving processing/ assembling operations were classified into the proper commodity categories. The 1992 statistics were not biased.

The third caveat pertains to the matching of Chinese and Hong Kong trade statistics by commodity category. Though great care has gone into the matching based on very detailed trade statistics, exact matching is not always possible. For instance, in 1992, Hong Kong's re-exports of woollen clothing to China from third countries were 238 percent of China's total imports of woollen clothing. This bizarre result arise because the trade statistics of China and Hong Kong in woollen clothing cannot be matched with perfect precision. Woollen clothing cannot always be distinguished from other clothing because some clothing contain both wool and other materials. This bizarre result is not very damaging because China's import of woollen clothing is quite insignificant (only US\$21 million in 1992).

China's imports from third countries via Hong Kong are taken to be Hong Kong's re-exports of third-country goods to China (Table 11). This is not exact as Hong Kong's re-exports are less than the value of China's imports by the cost of insurance and

freight, which is on the order of a few percent. The share of China's imports via Hong Kong from third countries is thus biased downwards, though the bias is not substantial.

China's exports to third countries via Hong Kong are taken to be Hong Kong's re-exports of Chinese origin to third countries. However, Hong Kong's re-exports of Chinese origin include a re-export mark-up as well as the cost of insurance and freight from China to Hong Kong. The re-export mark-up for goods of China origin is as high as 30 percent. The re-export mark-up includes the value-added and inputs (such as storage) of the Hong Kong middleman. This implies that the share of China's exports to third countries via Hong Kong is biased upwards quite substantially.

Bearing the above caveats in mind, Table 11 can easily be interpreted. The shares of Hong Kong as a middleman in China's wool trade were very high. Due to the misclassification of China's trade in woollen products involving processing operations into SITC division 9, the shares of Hong Kong as a middleman in China's trade were overstated from 1986 to 1991, and the 1992 shares were more accurate. Hong Kong's shares in China's woollen trade dropped in 1992 for woollen yarn and tops and woollen fabric, and the drop can be attributed to the commodity misclassification before 1992. Though the level of Hong Kong's shares before 1992 were biased upwards, the trends in the shares from 1986 to 1991 were still informative. There were no definite trends in Hong Kong's shares in China's wool imports and both imports and exports of woollen yarn and tops. However, Hong Kong's shares in China's wool exports and in China's imports and exports of woollen fabrics exhibited marked upward trends. Hong Kong's shares in the subtotals of wool, woollen yarn and tops, and woollen fabrics also exhibited an upward trend.

The upward trend can be partly explained by Hong Kong's increasing investment in China's processing operations. As Hong Kong is the natural harbour of the Pearl River Delta, the raw materials and output of Hong Kong's outward processing operations in the Delta were largely handled via Hong Kong, and processing operations have accounted for an increasing share of China's trade. Hong Kong's share of China's trade not related to processing operations has also risen, and this can be explained by the theory of intermediation (Yun-Wing 1991). As China decentralised its trading system, the number of firms with the autonomy to participate in foreign trade increased tremendously, raising the search costs of finding a suitable trading partner. Intermediation emerge to lower search costs, and the increasing demand for intermediation in China's foreign trade was largely channelled to Hong Kong due to its efficiency in trading.

For the sub-total of wool, woollen yarn and tops, and woollen fabric, Hong Kong's shares in China's exports were significantly higher than its shares in China's imports. This can partly be attributed to the upward bias in Hong Kong's shares in China's exports as a result of the inclusion of Hong Kong's re-export margin. However, this

bias can only be part of the explanation as the differences in the shares were very large. The other part of the explanation has to do with Hong Kong's investment in outward processing operations in China. The raw materials required by these operations do not have to go through Hong Kong as long as local ports are available. However, the output of these operations often have to undergo packaging or further processing in Hong Kong. In these cases, it is necessary to ship the output of these processing operations via Hong Kong.

China will continue to decentralise its trading system, raising search costs and increasing Hong Kong's share in China's wool trade. However, Hong Kong's investment in China is spreading north from Guangdong, tending to lower the shares of Hong Kong in China's trade as goods from northern ports may be shipped direct to the final destination instead of taking the detour through Hong Kong. Hong Kong's share in China's wool trade is already so high that it may not rise further.

The Hong Kong-China connection and WTO

After 1984, especially since 1988, Hong Kong-China economic connections have been dominated by Hong Kong's relocation of production operations to China. Certainly, if general production costs in China continue to be lower than that in Hong Kong and other economies which compete for foreign investment (with China), Hong Kong industrialists are free to relocate production operations of whatever activities to whatever localities in China and besides, there are always sufficient demands for whatever Hong Kong investors turn out in China, Hong Kong industrialists will continue to relocate production operations to China on a larger scale and covering a much wider scope. Whether in future, these conditions can be fulfilled and if not, what the major form of Hong Kong-China connection will be, depend largely on the trade and investment policies which China and other major overseas markets for Hong Kong exports are going to practise.

Since China started with a much lower level of general productivity (in the 1980s) and its economic reform and technology transfer policies are expected to become increasingly effective, general productivity in China will improve faster than that of Hong Kong thus diminishing the productivity gap between Hong Kong and China. Although the general productivity level of labour in China may be low, without institutional barriers, it is easy for Hong Kong investors to recruit workers from China and hire other productive factors at costs much lower than in Hong Kong. Thus, from the viewpoint of Hong Kong investors, it is prospective changes in China's trade and investment policies as well as other related regulations which will affect the profitability of investment in and trade with China most. The impacts of changes of trade and

investment policies in Hong Kong products' major overseas markets on the Hong Kong economy and thus the Hong Kong-China connection are mainly on the demand side and self-explanatory. Currently, there are two events which will shape general trade and investment policies in nearly all economies in the world, and which may affect Hong Kong-China economic relations significantly in the coming decade and beyond. First, the finalisation of the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) in April 1994, and second, China's application for resumption of GATT membership and admission as a founding member of the World Trade Organisation (WTO) which will be established in 1995 as an institutional framework for the implementation of agreements and arrangements reached in GATT negotiations.

The Uruguay Round agreements

Implementation of the agreements reached in the Uruguay Round widen market access, not only through the reduction or elimination of tariffs but also by means of converting other trade barriers to tariffs. The agreements, for the first time in the history of GATT negotiations and agreements, bring every sector of world trade under the GATT's rules and disciplines including trade in agricultural products, services and intellectual property. All GATT inconsistent restrictions will be phased out by three stages over a 10-year period and the trade be integrated into GATT. Phase 1 began in 1995 when products which together constitute no less than 16 per cent of total 1990 imports should be governed by GATT rules. This percentage should go up by another 17 per cent after three years (in 1988)—Phase 2, and another 18 per cent after 4 more years (in 2002)—Phase 3. All remaining products would be integrated by the end of 2004. Non-MFA restrictions not justified under GATT also need to be phased out by 2005. Besides the 'integration' element the phasing out process also includes the growth element. Growth rates according to factors of 16 per cent, 25 per cent and 27 per cent to existing restraint levels at the start of each of the three phases are applied. With the phasing out of MFA, textiles and garments trade will be under GATT rules. Furthermore, GATT's rules and disciplines are strengthened through clarifying rules related to various measures which would restrict trade, for instance rules concerning the use of anti-dumping restrictions and safeguard actions. Investment-related restrictions such as local content requirements, trade balancing requirements, domestic sales restrictions and restrictions on the use of foreign exchanges for imports, which distort trade will be gradually eliminated. Rules and standard are specified to prevent technical standards be used to create unnecessary obstacles to trade. Export or import restrictions designed to protect specific domestic industries will have to be phased out in four years. Measures are made to ensure rules of origin will not create unnecessary barriers to trade. Besides merchandise trade, there is an agreement putting services trade under basic fair-trade principles such as most favoured nation (MFN) treatment and transparency rules. GATT members are committed to strengthen rules and disciplines dealing with trade

in counterfeit goods and to agree as to what rights are to be protected (patents, copyrights, performers' rights, and so on) and for how long. Of all these agreements, the Hong Kong economy, especially its wool industry, will be affected most significantly by the phasing out of the MFA, rules governing anti-dumping and safeguard practices, trade-related investment and rules of origin as well as the inclusion of service trade under basic fair trade principles.

These agreements will directly remove trade and investment barriers against Hong Kong's entry thus widening the scope and enlarging the size of Hong Kong's export trade and investment at lower costs. Announcement of the predetermined schedule for phasing out GATT inconsistent restrictions reduces uncertainty and lowers adjustment costs for reshuffling output and investment structures by Hong Kong industrialists, conducive to long-term investment and productivity improvement. In addition, implementation of the agreements will increase world income through trade and investment expansion, in turn raising world demand for Hong Kong products. For instance, according to a study by the GATT Secretariat in November 1993, world trade volume will rise by US\$745 billion (1992 dollars) by 2005 and world income will increase by US\$230 billion as a result of trade liberalisation pursued according to the agreements of the Uruguay Round¹⁰ (Standard Chartered Hong Kong Economic Indicators, 1994). More importantly, since Hong Kong has great advantages in the provision and management of service trade; financial, commercial and personal which are even larger than that in the production of commodities (especially in comparison with developing economies) liberalisation of service trade could be very beneficial to Hong Kong's service sector. It may accelerate relocation of industrial production to other economies and thus de-industrialisation in Hong Kong as most manpower will be absorbed by the service sector. Definitely, relocation of service supplies undertakings to other economies will grow rapidly as well. More lenient treatment of the rules of origin, particularly more autonomy for the exporting economy to define the rules and decide whether they are observed will facilitate Hong Kong's globalisation of production processes. The impact may not be substantial.

First, Hong Kong has already adopted free trade policy. It imposes tariffs on only a few commodities and there is virtually no barrier against capital flow, so, further trade and investment liberalisation will not lower the production cost and increase foreign investment in Hong Kong directly.

Second, the phasing out of trade restrictions is on a gradual basis, so Hong Kong could not fully utilise its largest advantage—the possession of a highly flexible and adaptive production structure. For instance, the phasing out of MFA takes ten years. The importing economies are still permitted to keep up to 49 per cent of volume of imports outside GATT at the end of the transitional period just before the period expires. Furthermore, it is free for the importing economies to decide which item is to be

integrated into the GATT products. It is expected that the least trade sensitive items will be chosen for integration. The most of the products likely to be of interest to Hong Kong will only be integrated at the end of the 10-year transitional period. Hong Kong will definitely continue to face textiles quota within the coming decade. The above arrangements will be more beneficial to the new comers of textiles and clothing exporters but impose threats to existing large exporting economies of stagnant growth in competitiveness. The MFA has restricted the growth of clothing and textiles exports of the large exporting member economies but at the same time protected them under the quota system against the low-wage new comers since the quotas allotted depend on the past export performance of each member. The new arrangements will thus enhance direct competition among the exporting economies (old and new). It is expected that with the phasing out of the MFA, some of Hong Kong's textiles and clothing industries, especially those lower value added production process will no longer be able to survive or will have to be relocated elsewhere. Adjustment costs will be incurred. Furthermore, the agreements raise the cost but cannot stop the practice of anti-dumping and safeguard actions by importing economies.

Being a small economy, Hong Kong is subject to severe supply constraints. Since the late 1980s, it is mainly through the globalisation of production processes especially relocation of production operations to China which Hong Kong has maintained the competitiveness of its exports. The current Hong Kong-China connection will continue despite China's exclusion from the WTO. The Agreements will not have much influence on Hong Kong as long as China remains the most favourable region for production relocation. Without intense cooperation with China, Hong Kong alone would be able to capture only very little of the new business opportunities which will arise. Nevertheless, service trade liberalisation under the Agreements should be of great value to Hong Kong even without China's cooperation. After all, as China has already become Hong Kong's largest trade and business partner and indirectly, a determining factor of the competitiveness of Hong Kong's manufacturing exports, implementation of the Uruguay Round Agreements will not add many benefits to Hong Kong even if exclusion of China from WTO will not do much harm to China or inflict strong anti-trade biased responses from China. On the other hand, in case exclusion proves harmful to the Chinese economy or makes China retaliate, Hong Kong will definitely suffer. Hong Kong will be forced to find other substitute for China connection which would be very costly.

China's resumption of GATT membership

The impact of China's resumption of GATT (now WTO) membership on the Hong Kong economy would be very complex. The most important factors include: whether China, after becoming a GATT member, could really enjoy general most favoured

nation treatment; how China would interpret and implement the article on national treatment for foreign investment and whether China would maintain its less-developed economy status.

As a member of GATT, China would be entitled to generalised most favoured nation treatment. Such an arrangement would encourage Hong Kong's globalisation of trade and production processes via China. Second, reciprocal removal or diminution of trade barriers between China and other GATT members as well as the elimination of investment-related restrictions, particularly, trade balancing requirements, local content requirements and restrictions on domestic sales will certainly increase the size of China-related trade and investment. As a result, Hong Kong's role as the intermediary agent, investor, administrator and supply source of consumer goods for China trade and investment will be enhanced and become more diversified. The most spectacular growth should occur in the provision of management and other services to China-related business. With more opportunities and easier accessibility to a wide scope of activities in China, Hong Kong's globalisation of production and trade would become more efficient. Finally, if the utilisation of the rights under GATT does lead to higher income and purchasing power of the Chinese people via rapid growth of trade and investment, Hong Kong will benefit further because China's demand for Hong Kong products will increase as well.

On the other hand, China's assumption of GATT membership may threaten Hong Kong in two ways. First, with China's practice of national treatment for foreign investors and China's trade and investment administration becoming more transparent to the Western investors, some of Hong Kong's investment in China may gradually be driven out of China¹¹. GATT's requirement for members to grant national treatment for all foreign investors was designed to protect foreign investors against the host country's discriminatory policies. However, the situation is completely different in China. Certainly, foreign investors are still subject to unfair treatment (in comparison with their local counterparts) in some areas but on balance, they enjoy more tax concessions and policy privileges. In most areas, foreign-involved enterprises need not pay any taxes or even the import tariffs during the first five years of operation. They also gain from local authorities' competition for foreign investment via competitive granting of concessions in excess of what the law permits. As a whole, in China local enterprises which do not have any involvement in foreign investment are relatively unfairly treated. Preferential treatment for foreign-involved enterprises has boosted the growth of foreign investment and so increased the degree of 'openness' of the Chinese economy. However, unfair treatment against local enterprises has not only led to sub-optimal resource allocation (especially in those labour-intensive manufacturing industries in which local producers do have advantages) but upset the macroeconomic stability of the Chinese economy.

Starting from the mid-1980s, approval of foreign investment has been decentralised and devolved to local authorities. Since then, local enterprises have found it easier to acquire the status of foreign involvement. Enterprises with foreign involvement are always exempt from macro-economic regulatory policies, especially retrenchment. Thus the securing of the foreign-involved status provides an easy avenue for local authorities and various departments to evade the macro-economic regulatory policies. The effectiveness of the macro-economic regulatory policies in China is undermined. Furthermore, as preferential treatment is granted on regional basis (in favour of the coastal areas relatively against the interior regions), it has given rise to an extremely skewed pattern of spatial allocation of foreign investment and intensified regional income disparities in China. The Chinese central authority has noted all these defects and proceeded to narrow, the policy advantages enjoyed by foreign-involved enterprises. The tax reforms introduced in January 1994 is one of the first steps to narrow the 'policy gap'.

Policies and concessions for attraction and management of foreign investment practised in various regions will be unified under the state leadership because regional discriminatory policies or treatment for foreign investment. Certainly, some concessions for foreign investment will still be retained but they decline on a relative basis in comparison with state enterprises. In such a way, China's practice of national treatment for foreign investment (which is perfectly in line with GATT requirements) implies some relative decreases in the protection of existing foreign investment against competitions from local undertakings. It will give a very serious blow to Hong Kong's investment in China, especially in those labour-intensive industries in which the local enterprises are as productive as the foreign-involved enterprises. In addition, with the assumption of GATT membership, China's trade practice will become more transparent to other overseas investors and local enterprise in China will have easier and less expensive access to information on trade and investment in overseas economies. After all, under the GATT it will be more convenient and less costly for China to invest in overseas economies. Thus, it is expected, Hong Kong's role as an intermediary agent between China and other overseas economies will diminish. The decrease of intermediation cost for China's local enterprises under GATT will undermine relative competitiveness of Hong Kong's investment in China further.

Obviously, if all the above changes do happen, and Hong Kong is unable to alter its current industrial investment structure in China of which a predominant proportion is labour-intensive manufactures in which the Chinese enterprises are equally productive, Hong Kong's industrialists will be hard hit by China's resumption of GATT membership. As a matter of fact, among other reasons (such as expected persistence of inflation) after the introduction of China's tax reform package which (at least from the view-point of most Hong Kong investors) reduces the privileges enjoyed by foreign-involved enterprises relative to local enterprises, contracted foreign direct investment in 1994 declined by over 26 per cent.

If China is not permitted to maintain its less-developed economy status, it is not eligible for implementing special clauses for protection of less-developed economies under GATT to protect its 'infant industries'. Compared with less-developed economies, China will have to liberalise its market more rapidly and extensively. China's heavy industries, especially the newly emerged high-technology industries and basic industries which have been subject to high level of protection and are far less competitive than the counterparts of the developed economies will be fatally affected by the influx of less expensive imports from the West. At the same time, with the liberalisation of services trade, especially financial services, much of the Chinese market will be captured by the well known companies in the West since the inexperienced Chinese undertakings are no match for them under relatively free competition.

On the other hand, China's labour-intensive consumer goods industries may benefit from trade liberalisation in the importing economies. Then the Chinese economy will be transformed practically into an outward processing base. Similarly, with the elimination of subsidies and free import of agricultural produce, China's agricultural sector will also be injured. If China is not allowed to practise at least some of the special clauses for protecting the interests of the less-developed economies (at least temporarily) and has to follow the general practice of the developed economies, resumption of GATT membership will effect China's national economy in the short run in ways which may not be accepted by China's leadership. In that situation, China may quit and resort once again to bilateral agreements with overseas economies for conducting trade and investment. China may reconsider the role of trade and investment and reform its trade policies in ways which may turn out to be less liberal and more discriminatory.

In short, the possible impacts of the implementation of the Uruguay Round Agreements and China's resumption of GATT membership on the Hong Kong economy and the future Hong Kong-China connection are very complex. They are very sensitive to China's policies in implementation of national treatment for foreign investors under GATT as well as the extent to which China can make use of the special clauses for protection of the less-developed economies to protect its modern basic industries. Hong Kong may have more investment and trade opportunities especially in services trade but Hong Kong investors will have to face more intense competition from both local enterprises in China and overseas investors. Further upgrading and reshuffling of industries in Hong Kong will follow if the gains from globalisation of production and trade are to be maximised. After all, as Hong Kong's largest comparative advantage relative to mainland China is in the provision of services, Hong Kong will ultimately become a service centre for South China and the control base for highly globalised trade and investment with production operations located in China and elsewhere.

Conclusion

Since 1979, as a result of China's pursuit of open-door policy, the Hong Kong China-connection in Hong Kong's wool industry and trade has undergone some fundamental changes. The connection changed from primarily merchandise trade centred on the import of woollen clothing from China, to the relocation of production operations of woollen goods to China. The relocation of woollen goods production, however, has gone through two phases. During 1979-84, Hong Kong imported a lot of incompleated woollen garments from China for processing into finished goods for export. During 1982-84, on average, imported incompleated woollen garments from China should have contributed to over 30 per cent of Hong Kong's domestic export value of woollen clothing. This phase came to an end when the US imposed a more stringent rule of origin (for clothing exports to claim as originated from Hong Kong) which prohibited Hong Kong to use a lot of knitted pieces manufactured from China. The consequences were drastic decrease in import of incompleated woollen garments from China and the acceleration of production automation in Hong Kong's woollen clothing industry through import of automated and computerised knitting machines. The second phase (from 1985), witnessed a continual decrease in import of incompleated woollen garments from China and some decreases in domestic exports of woollen yarn to China. Starting from 1986 especially since 1988, relocation of the whole production process of woollen clothing to China has accelerated. Since then, the China connection has been dominated by the relocation of complete production processes of woollen clothing between Hong Kong and China. Hong Kong specialises in manufacture of high-priced and more fashionable woollen garments with highly automated machines while the production bases in China concentrate on production of relatively low-priced standardised garments with a lot of labour input. Most of the output turned out from Hong Kong-involved production bases in China are for export to destinations other than Hong Kong and they have to be exported to Hong Kong first. In this phase, Hong Kong's re-export trade of woollen clothing especially re-exports of China origin surged up dramatically. It is estimated that by 1993, the total value of Hong Kong-involved outward processing trade with China, and the triangular trade for woollen clothing at least exceed 90 per cent of that of Hong Kong's domestic export value. Inclusive of the output value retained in China for consumption, the output value of Hong Kong-involved production of woollen clothing should have exceeded that of Hong Kong's domestic export value.

However, the extent of production relocation of woollen goods to China has lagged behind that of Hong Kong's total manufacturing industry and clothing and textiles industry. Trade restrictions under MFA imposed on both Hong Kong and China's clothing and textile exports, strict implementation of the rules of origin for Hong Kong

domestic exports and competition from local producers in China are major causes for the clothing and textiles industry lagging behind manufacturing industries as a whole. On the other hand, the lesser extent of production relocation of woollen goods relative to the clothing and textiles industries could be attributable to a larger capital intensity for the production of knitted woollen garments as well as larger adaptability of woollen clothing production to the production environment in Hong Kong so that a relatively larger proportion of production operations has been retained in Hong Kong. Furthermore, Hong Kong has played a very important intermediary role for China's woollen goods production. Hong Kong-involved enterprises accounted for a large proportion of China's exports of woollen goods. Most of China's woollen goods exports have to be exported to Hong Kong for re-export to other destinations. However, the share is expected to decline in future. The impact of the implementation of Uruguay Round Agreements may not be substantial because it is expected—for the coming decade Hong Kong still has to face trade restrictions on some of its clothing and textiles exports. China's resumption of GATT membership could, however, be very complex. Hong Kong investors may face more trade and investment opportunities, but more definitely, they will meet much intense and fierce competition from both local enterprises in China and overseas investors. Hong Kong's current investment in textiles and clothing production in China will be affected very seriously. To cope with these changes, Hong Kong investors need to upgrade and reshuffle their current production operations in China towards more technology and capital-intensive activities.

Notes

- ¹ Unless otherwise specified, the statistical data used in the paper are supplied by Census and Statistics Department of Hong Kong and drawn from various issues of *Hong Kong Trade Statistics*, *Hong Kong External Trade*, *Hong Kong Review of Overseas Trade*, *Hong Kong Monthly Digest of Statistics*, *Survey of Industrial Production*, *Hong Kong's Manufacturing Industries*, *China Customs Statistics* and *Almanac of China's Foreign Economic Relations and Trade*.
- ² According to 1991 *Survey of Industrial Production*, in 1991 the number of establishments engaged in knitting of fabrics, wool, was 6 which together employed 26 persons. However no other information concerning production is disclosed. Similarly, no information about the manufacture of woven woollen fabrics in Hong Kong is released.
- ³ For a more detailed discussion on the role of imports from China on Hong Kong's manufacturing exports performance before 1979, see Hsueh Tien-tung and Woo Tun-oy (1984), *Trade Between Hong Kong and China*, Foreign Economic Relations and Trade Publishing House, Beijing:43-57 and particularly, Woo Tun-oy (1977), *Foodstuff Imports from China : Its Impact on Hong Kong's Manufacturing Exports Performance 1961-1973*:56-89. Unpublished M.Phil. thesis, The Chinese University of Hong Kong.
- ⁴ On the basis of the value of re-exports of China origin the value of outward processing trade with China is estimated as $OP^C = RX \times (OP/RX_C)$ where OP^C is the estimated value of outward processing trade with China for woollen clothing; OP/RX_C is the ratio of the value of outward processing trade with China to Hong Kong's re-export of China origin for total clothing as compiled by Census and Statistics Department of Hong Kong; RX is the value of Hong Kong's re-export of China origin of woollen clothing.
- ⁵ The new ratio = $[M^C \times (OP/M) \times (1+r)] / DX^{WC}$ where OP/M is the ratio of the value of outward processing trade with China to that of imports from China for total clothing; M^C is the value of imported Chinese woollen clothing and r = (gross margin/purchase of goods for sales) compiled from data on import/export trade of clothing (Census and Statistics Department, *Hong Kong Annual Digest of Statistics 1993*, Section 5, Distributive Trade, Transport and Services, Table 5.5); r is usually larger than 0.2; D^C is Hong Kong's domestic export value of woollen clothing.
- ⁶ The total value of outward processing trade and triangular trade = $(OP^C / 0.81)$.
- ⁷ The total value of outward processing trade and triangular trade = $OP^C + 0.5RX$ where RX is the value of Hong Kong's re-export of woollen clothing of China origin.

- ⁸ The estimated value = $(OP^C/0.81)(1+r)$; for r , see note 5.
- ⁹ The estimated value = $(OP^C+0.5RX)(1+r)$; for r , see note 5.
- ¹⁰ *Standard Chartered Hong Kong Economic Indicators*, February, 1994.
- ¹¹ According to *Techno-Economic and Market Research Study of Hong Kong's Textiles and Clothing Industries 1991-1992*, as early as in 1990, the operating environment for textiles and clothing industries in China was at par with Hong Kong. The study ranked China as possessing greatest growth potential in clothing and textiles production and trade compared with other competitors including Hong Kong. Hong Kong's growth potential was however ranked as below average.

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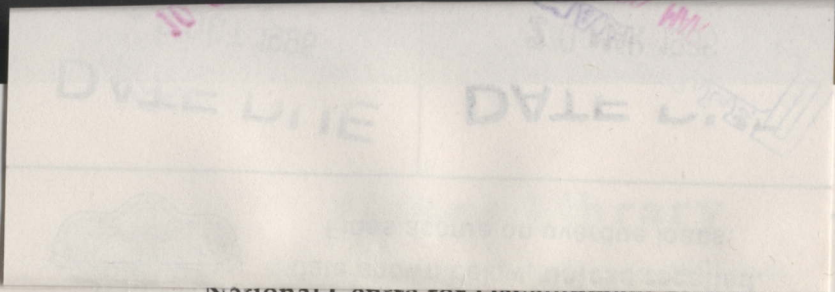
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