This thesis represents an attempt to evaluate the effectiveness of the Chinese government’s policy of encouraging direct foreign investment in manufacturing by examining the connection between the policy’s economic objectives and the empirical evidence.

One of the most important characteristics, and the biggest problem in evaluating the policy is that it has too many goals: politically, to enhance the Chinese Communist Party’s legitimacy and the government’s authority in China, and to promote the mainland’s unification with Hong Kong, Macao and Taiwan; economically, DFI is expected to play an important role in 1), expanding China’s capital formation; 2), introducing new technology; 3), increasing export growth; 4), improving economic efficiency, and ultimately, speeding up economic growth.

The study concludes that, being properly placed in the international environment and by successfully mobilizing the huge domestic human and material resources, the policy has achieved some success in economic terms in attaining the first, second and fourth economic objectives. There is however great scope to improve efficiency.
ACKNOWLEDGEMENTS

The greatest gratitude goes to my supervisor, Professor Nigel Harris. Without his constant guidance, encouragement and inspiration, it would be impossible for me to complete this work.

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TECHNICAL NOTES

1. Value amounts that appear in the text are always at current prices, unless otherwise stated.

2. Average annual growth rate of any variable, unless adapted from other sources, is computed by using the following formula: $\ln x(i) = \ln x(0) + n \ln (1 + a)$, where $x(i)$ and $x(0)$ are its values at ending and starting years, respectively. In natural logarithm, $n$ the time gap between the starting and ending years, $a$ the average annual growth rate.

3. RMB is the abbreviation of the Chinese currency, that is, Renminbi. Yuan is its unit.

4. A billion equals one hundred million in the text.

5. The titles of all Chinese works appear in Pinyin, followed by English transcript included in parenthesis.
ABBREVIATIONS

AFAI: accumulation used in fixed asset investment
AGR: annual growth rate
BCI: basic construction investment
CAERFT: China's Almanac of External Economic Relationships and Foreign Trade
CBR: The China Business Review
CC: commercial credit
CCP: Chinese Communist Party
CE: cooperative exploitation
CEN: China Economic News
CEOA: Coastal Economic Open Area
CJV: contractual (cooperative) joint venture
CT: compensation trade
DFI: direct foreign investment
DPP: domestic procurement price
EJV: equity joint venture
EL: external loan
EOFIEs: export-oriented FIEs
ER: Economic Reporter
ER: exchange rate.
ETDZs: Economic and Technological Development Zones
FAI: fixed asset investment
FEACs: Foreign Exchange Adjustment Centres
FEER: Far East Economic Review
FI: foreign investment
FIBC: foreign investment used in basic construction
FIEs: foreign investment enterprises
FIFA: foreign investment in fixed asset.
FTCs: foreign trading corporations
GG: Guawuyuan Gongbao (Communique of the State Council)
GIAO: gross industrial and agricultural output
GSB: Guangdong Statistics Bureau
CHAPTER 1. INTRODUCTION

Few changes seem to be more dramatic than what has happened to foreign capital in China. It was important in the Chinese territory before the second half of the nineteenth century. The Treaty of Nanking of 1842, which marked the end of the Opium War, forced the Chinese government to open five port cities to foreign businessmen as well as to foreign capital. Another unequal treaty, that is, the Treaty of Shimonoseki of 1895, further permitted foreigners to establish factories in the open ports, although a small number of foreign factories existed before the treaty.

In the following four to five decades, foreign capital grew into such a dominant and aggressive power in Chinese society that foreign imperialism, represented by foreign capital, was made the key enemy of the Chinese revolution, led by the Chinese Communist Party (CCP). In fact, after the CCP took power from the Nationalist government, exiling it to Taiwan in 1949, foreign capital was eradicated from the Chinese soil within less than three years. In the following three and half decades, China kept its door closed to foreign capital until the late 1970s, when the Chinese government adopted the so-called open policy and encouraged the entry of foreign capital. As a matter of fact, the Chinese government has worked so hard to attract more foreign investment (FI) that, among the general public, there is a feeling that FI is totally new to China.

What has brought about this change? Why and to what extent has the thinking of the CCP been changed? What objectives was this change designed to achieve, and most importantly, whether, how and to what extent have the objectives been achieved? These are the principal questions that this thesis aims to ask and attempts to answer.

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1. The five cities were: Guangzhou, Xiamen, Shanghai, Fuzhou and Ningbo.
1.1. China’s FI and Economic Development before 1949

1.1.1. General Features of FI in China before 1949

To start with, it is necessary to point out that the definition of FI in China before 1949 is markedly different from the definition of FI today. In the words of C. F. Remer, who undertook a pioneering work on China’s FI before 1932, it was defined "as a source of income owned by a 'foreigner' who may live in or outside of China."¹ That is to say, FI in China was defined on an ethnic line: overseas Chinese investment in China was not accounted as FI, while the investment made by "foreigners", who might have never lived abroad, was accounted as such. This is in contrary to its contemporary definitions. The International Monetary Fund (IMF) defines FI as the indebtedness to non-residents of the recipient economy.² Similarly, the Chinese government’s official definition of FI includes overseas Chinese investment as well as investment by non-Chinese. As a matter of fact, overseas Chinese investment constitutes the bulk of FI that China has received so far.

There were no official statistics of FI in China before 1949, so the only available data are estimates, among which Remer’s estimate has served as a basis for others. According to Remer, FI (including liabilities of foreign companies) in China amounted to US$ 788 millions in 1902, US$ 1610 million in 1914 and US$ 3243 million in 1931 respectively, at current prices.³ Based on these figures, Chi-ming Hou points out that FI in China, measured in constant prices, probably increased by 87 per cent in the 12 years from 1912 to 1914, and increased only about 20 per cent in the 17 years from 1914 to 1931.⁴ It is apparent therefore that the inflow of FI slowed down during and after the World War I.

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³ Ibid., p. 69. He included both Hong Kong and Manchuria.
Furthermore, based on the estimate of the Institute of East Asian Studies in Japan, Hou estimates that the amount of FI in China in 1936 was US$ 3483 millions.¹

For the years before 1902 and after 1936, estimates made by Chinese scholars are available, mainly these made by Wu Cheng-ming. There is an important difference between the scope of the Chinese estimates and that of Remer and others, however: the Chinese estimates include not only foreign companies' liabilities, as Remer did, but also the Chinese assets in companies that were controlled by foreign interests, which tends to overstate the value of FI. But Wu Cheng-ming's estimate excludes both Manchuria and Hong Kong. As a whole, the Chinese estimate is only slightly higher than Remer's. A complete set of the Chinese estimate for all the key years is presented in table 1.1.

Table 1.1, Changes of FI stock in China before 1949 ²
(US$ millions)

<table>
<thead>
<tr>
<th></th>
<th>1894</th>
<th>1902</th>
<th>1914</th>
<th>1930</th>
<th>1936</th>
<th>1941*</th>
<th>1948**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>119.4</td>
<td>812.8</td>
<td>1711.2</td>
<td>3314.6</td>
<td>4178.9</td>
<td>9095.5</td>
<td>3068.8</td>
</tr>
</tbody>
</table>

Note:
* Includes Japanese investment in 1944, when it was at a peak. All the properties of Sino-Japanese cooperation enterprises are accounted as Japanese investment.
** Excludes the part of American aid which had not been transferred as loans, which was estimated to be US$ 4709 millions.

It can be seen from the table that FI reached its peak around 1941. By then, however, virtually all the Western properties had fallen into the hands of the Japanese occupying forces, and Japan had become the dominant foreign investor in China. Then, as a result of the defeat of the Japanese-German

¹ Cited in Chi-ming Hou, Ibid., p. 13.
alliance in World War II, Japanese and Germany and Italian properties were expropriated by the Chinese government. This is the main reason for the dramatic drop in FI in the second half of the 1940s. In real terms, it grew most rapidly in two periods, one is between 1894 and 1914, the other is between 1936 and 1941.

FI in China before 1949 was dominated by direct foreign investment (DFI), while foreign loans played only a minor role. The share of DFI in total FI increased from 64 per cent in 1902 to over 75 per cent in the 1930s, although foreign loans were rather significant in two separate periods, namely, before the end of nineteenth century and in the 1940s. In the first period, foreign loans were sought by the Chinese government to finance the indemnities imposed as a result of the Sino-Japanese war, while, in the second period, the American government supplied large loans to the Chinese government to fight first, the Japanese, then the Communists.

FI in China before 1949 played an important role in the modern Chinese economy. When FI started to enter, China was still agrarian. There was little industry, and its predominant form was handicrafts, although certain elements of capitalism had emerged. As Wu Cheng-ming argues, for instance, there was already a separation of labour from the means of production in a number of industrial branches such as silk-making.¹

Foreign capital was the harbinger of China's modern factory industries. It was foreign capital that introduced the use of machines and power to China. Foreign capital also pioneered virtually every branch of Chinese modern industry. Moreover, it promoted the development of China's indigenous capital, ie., state capital and national (private) capital.

It was under the influence of foreign enterprises that the Chinese government in the late Qing Dynasty established some military factories, and then civil factories in the 1860s, and thus giving rise to China's earliest state-owned enterprises. In these enterprises, both foreign personnel and their Chinese partners, the so-called "compradors", who had gained insight

and knowledge of modern business from their contacts with foreign businessmen, played a leading role.

Initially, Chinese private enterprises were forbidden to engage in factory production. Later on, the ban was lifted. As a result, China's national (private) industrial capital started to develop. Its relationship with foreign capital was, however, rather different from that of state capital in the sense that, although the national capital also depended heavily on foreign capital for raw materials and machinery, its businessmen often felt squeezed by the powerful alliance of the state capital and foreign capital, an alliance strong both economically and politically. Thus during the period of World War I when the inflow of FI slowed down, national capital experienced accelerated growth (see table 1.2).

Table 1.2. China's total productive capital stock
1984, 1913, 1920, 1936

<table>
<thead>
<tr>
<th>Year</th>
<th>Total (10,000 yuan)</th>
<th>Domestic capital %</th>
<th>Foreign capital %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1894</td>
<td>8952.6</td>
<td>39.3</td>
<td>60.7</td>
</tr>
<tr>
<td>1913</td>
<td>154,095.6</td>
<td>19.7</td>
<td>80.3</td>
</tr>
<tr>
<td>1920</td>
<td>236,825.0</td>
<td>29.6</td>
<td>70.4</td>
</tr>
<tr>
<td>1936</td>
<td>821,000.0</td>
<td>21.6</td>
<td>78.4</td>
</tr>
</tbody>
</table>

Despite the development of China's indigenous capital, however, foreign capital was the dominant force in the modern sector of the Chinese economy before the 1940s. Table 1.2 shows the shares of foreign and domestic capital in China's total productive capital between 1894 and 1936. It indicates that, during the four decades of the twentieth century, foreign capital accounted for 70 to 80 percent of the total productive capital in

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1. Ibid., Table 8. p. 131. Productive capital here was defined as including modern manufacturing, mining, transport and communication, where machines and power were used.
China. The situation did not change until the end of the Pacific War, when the massive foreign properties, mostly under the Japanese control, was expropriated and nationalized, becoming what the CCP called the "Bureaucratic capital".

However, this is not to say that foreign capital prevailed in the economy, because the modern sector, where foreign capital was concentrated, was only a minor section of the entire Chinese economy. For example, the modern sector contributed no more than 13 percent of the national income in 1933.1

Furthermore, FI was concentrated in trading (particularly foreign trading), mining and power generation, transport and communication. For example, in 1936, while the ratio of total foreign to domestic productive capital was about 4, the same ratio was more than double this, about 9, in communication and transport sector.2 In the same year, foreign capital controlled 95 per cent of pig iron output, 83 per cent of steel, 66 per cent of mechanically-mined coal, and 55 per cent of power production in China.3

As far as FI in manufacturing was concerned, its significance was limited, although increased over the years. The share of manufacturing investment in the total DFI, according to Wu Cheng-ming, was 11.0 per cent in 1914, 15.8 per cent in 1930, 20.6 per cent in 1936, and 23.3 per cent in 1948.4

The share of foreign firms' output in the total Chinese manufacturing output was nonetheless significant. It is estimated that foreign firms produced over half the output of modern factories in a number of industries in 1933, although the ratio was only 35 per cent for modern manufacturing industries as a whole.5 The net product of modern sector, however, accounted for only about 25 per cent of manufacturing industries in the same year.

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2. Wu Cheng-ming, 1985, op. cit., p. 130
3. Ibid., p. 131.
4. Ibid., p. 36.
5. Chi-ming Hou, op. cit., Table 29, p. 129.
Geographically, FI was concentrated in the coastal port cities. The city of Shanghai alone accounted for about one-third of all the DFI in the 1930s. Consequently, China’s economic development before 1949 was concentrated in the coastal areas. This historical legacy was regarded with much disdain during the Mao era, after the liberation. A great deal of effort was made prior to the 1970s to remedy this uneven regional development pattern.

In terms of its contribution to total capital formation in China, FI seemed to have been rather limited. Thomas Rawski’s data suggest that new foreign business investment totalled less than 2 percent of China’s annual fixed asset investment (FAI) during 1931-1936. In comparison, the value of overseas Chinese remittances amounted to some 8 per cent of China’s FAI. The magnitude of overseas Chinese remittance is self-evident.

1.1.2. Assessment

It is generally agreed that FI had a profound impact on the Chinese economy and society before 1949. But views differ considerably among writers. For instance, Chi-ming Hou had a favourable view of it in his writing. He claimed:

"Although small in amount, foreign capital played a significant role in bringing about whatever economic modernization existed in China before 1937."²

This happened, Hou maintained, not only through the direct contribution that FI made to the modern sector's development, but also in that "foreign investment... supplied the fuel for nationalism, and that nationalist spirit provided the will to develop modern industries,"³ in the party of the domestic entrepreneurs and the Chinese government. Furthermore, FI helped change the attitude of the Government towards economic affairs, towards how savings were employed, and towards technology and inventiveness. Even the notorious treaty port system was found to play a

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3. Ibid., p. 217.
positive role in providing “a degree of law and order in the treaty ports where the Chinese-owned modern enterprises were located.” (p. 217).

But the majority of contemporary Chinese writers have followed Mao Tse-dong’s assessment, which does acknowledge the positive impact that foreign capital made on destroying the Chinese pre-capitalist economy and in stimulating the development of Chinese capitalism, but stresses more the negative effects of FI on China. Mao Tse-dong wrote in 1937:

"As China’s feudal society developed its commodity economy and so carried within itself the embryo of capitalism, China could of herself have developed slowly into a capitalist society even if there had been no influence of foreign capitalism. The penetration of foreign capitalism accelerated this development. Foreign capitalism played an important role in disintegrating China’s social economy, because on the one hand it destroyed the foundation of her self-sufficient natural economy and disrupted her handicraft industries in both the cities and peasant homes, and on the other hand it accelerated the development of commodity economy in town and country.

Apart from its disintegrating effect on the foundation of China’s feudal economy, this situation also created certain objective conditions and possibilities for the development of China’s capitalist production. For the destruction of the natural economy created a commodity market for capitalism, and the bankruptcy of large number of peasants and handicraftsmen created a labour market for it.”

He also pointed out another positive aspect of the changes brought about by foreign capitalism, that is, the emergence and development of the Chinese proletariat. Then he turned to the negative effects of foreign capitalism:

"Yet this fresh change represented by the emergence and development of capitalism constitutes only one aspect of the change that has taken place since imperialist penetration into China. There is another aspect which co-exists with it as well as hampers it, namely,

the collusion of foreign imperialism with China's feudal forces to arrest the development of Chinese capitalism.\textsuperscript{1}

Subsequently, Mao suggested that the chief targets or enemies of the Chinese New Democracy revolution were "none other than imperialism and feudalism, namely, the bourgeoisie of the imperialist countries and the landlord at home". He then further pinpointed imperialism as the primary target.\textsuperscript{2}

The World War II (or more specifically the Anti-Japanese war in China) and China's alliance with the Soviet Union as well as Britain and the United States during the war seemed to dramatically change Mao's perception of the so-called foreign imperialism: in his speech to the Seventh National Congress of the CCP on coalition government in 1945, he no longer referred to Britain and the United States as imperialists but the "great democracies".\textsuperscript{3} In the same occasion, he said:

"We welcome foreign investments if such are beneficial to China's economy and are made in observance of China's laws... we shall be able to absorb vast amounts of foreign investments."\textsuperscript{4}

But after the three years' civil war and the support that the United States government provided to the Kuomingtung government during the war, Mao seemed to again become very suspicious about western countries. He said in July 1949:

"At present the rulers in Britain and the United States are still imperialists. Would they extend aid to a people's state? If we do business with these countries or suppose these countries would be willing in the future to lend us money on terms of mutual benefit, what would be the reason for it? It would be because the capitalists of the countries want to make money and the bankers want to earn

\textsuperscript{1} ibid., p. 78.
\textsuperscript{2} ibid., p. 87.
\textsuperscript{4} Ibid., p. 312.
interest to relieve their own crisis; that would be no aid to the Chinese people.”

The antagonism increased greatly after the Korean war, which lasted from 1950 to 1952. As will be shown below, it was during the war that the Chinese Communist government took a radical approach to control foreign capital in China.

In sum, Mao recognized some positive aspects of foreign capital before 1949 in China. Indeed, he even envisaged the utilization of foreign capital in the construction of new China. As will be shown later, however, the historical events after the foundation of the new China prevented that vision from being realized.

Mao's assessment of the foreign capital before 1949 has been variably followed as the official line of the CCP, and later the Chinese government, depending on the political need of various periods: sometimes the negative aspects are stressed, and some other times, especially since late 1970s, the positive aspects are emphasized.

It has also dominated the Chinese academic writings on the issue. By and large, what Chinese academic writers have done in the past is to extend or substantiate what Mao is said to have said in accordance with current political climate. There is one issue, however, that was not pinpointed by Mao, but has received the attention of academics. That is the question of the direction of FI and its impact.

A number of Chinese writers have pointed out that FI in China before 1949 was predominantly commercial rather than industrial capital, and that, largely for this reason, they believe, the impact of foreign capital on China's industrialization was overwhelmingly negative.

1.2. New China’s Treatment of Private Capital and Economic Development up to the late 1970s


The CCP became China’s ruling party in 1949. The impact of such a change was reflected in the fact that the Party put a great deal of effort to get the war-damaged economy moving again, rather than immediately moving to undertake the anticipated "socialisation" of the economy.

In this regard, the years from 1949 to 1957 can be divided into two periods, each of them with different goals. The first period ran from 1949 to 1952. Its main task was to rehabilitate the economy, which was perceived as crucial for maintaining a stable social and political order in the years immediately following liberation. Subsequently, the government adopted different tactics towards the "three capitals", namely, bureaucratic capital, national capital and foreign capital.

The bureaucratic capital was immediately confiscated by the Communist government and became the principal source of today’s state-owned enterprises. In the meantime, private enterprises and foreign enterprises were kept largely intact. Moreover, they were encouraged to carry on their business as usual. Indeed, according to Wu Cheng-ming, during the period from 1949 to 1952, private business was expanded: the number of enterprises increased by 21.4 per cent, employment by 25.1 per cent and gross output by 54.2 per cent. But such business was becoming increasingly dependent on the government and in the end was willing to be taken over by the government. Hughes and Luard give us a vivid account of the situation:

"In most cases, however, this process took place by means of a process of gradual penetration. Thus in the early days, when many firms had wished to close down but were forbidden by law to lay off labour, the Government offered to guarantee the sale of an

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enterprise's output. Later the work of many factories was taken up with government orders and processing contracts. The extension of a government monopoly over virtually the whole field of the wholesale trade meant that most businesses were dependent on sales to government organizations. In addition all sources of credit were in the hands of the Government. In this way private enterprises rapidly became almost entirely dependent on the Government for their survival.

"It is likely that in some cases the position became so difficult for private firms that they were only too glad to be taken over by the Government. This was the method adopted by the authority in the case of most of the large foreign firms operating in China. In consequence, the Government obtained assets worth hundreds of millions of pounds (the British properties alone was valued at £200 millions), without paying compensation."  

More details were given by Cheng Chu-Yuan about what happened to the foreign capital then:

"The outbreak of the Korean war further aggravated the difficulties of foreign enterprises. In December 1950, after the U.S government seized control of Communist China's property in areas under U.S. jurisdiction, the Peking Government immediately issued a decree to control American property and freeze American bank deposits on the mainland. In April 1951, similar measures were extended to the British-owned enterprises. In the summer of 1952, the British merchants elected to leave the mainland. After almost three centuries, western investment in the Chinese mainland was terminated."  

The second period, from 1953 to 1957, was the time of China's first Five-year plan. The main economic task was to reconstruct the economy on the one hand, and on the other hand to further "socialize" (i.e., to reduce

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private economic activities) the capitalist industry and commerce and individual handicrafts industry.

The "socialization" of capitalist industry and commerce was accomplished in the so-called Socialist Transformation of Capitalist Industry and Commerce Movement, which was planned to be complete within fifteen years from 1953, but actually took only just over three years from 1953 to 1956. The Movement composed of three phases: in the first phase, government orders took up most of private enterprise' production and the latter became heavily dependent on the government; in the second phase, some private enterprises were transformed into private-state joint enterprises, in which the former capitalists still exercised ownership rights in terms of sharing profits and management; in the third phase, however, private enterprises were transformed into private-state joint operations by whole trades, and the former capitalists no long exercised ownership rights, but served as management on the appointment of the government.

A five percent annual interest payment was however supposed to be made to the former owners for ten years from 1956, but this was officially stopped during the Cultural Revolution, but resumed after 1977. It is impossible to tell how widely this payment was made. As another element of the programme, handicraftsmen were organized into cooperatives, which were the predecessors of today's collectively-owned enterprises.

This second period saw a close cooperation between China and the Soviet Union, partly because the western countries joined the U.S. embargo against China following the Korean War. A large number of Soviet technical and economic personnel were brought in to serve as advisers. China also received huge amounts of loans from the Soviet Union.

---


2. Collective ownership is defined in principle as such where the means of production belong to the people who work in it. The earliest collectively-owned entities were resulted from the cooperativisation movement (both rural and urban) during the 1950s. But majority of them have been changed to be state-owned enterprises at various points. The bulk of today's collective-owned enterprises are made up by those which have been established after 1979, following the economic reform.
Moreover, about half of China’s foreign trade was now with the Soviet Union.

Nonetheless, Mao still held a liberal view towards foreign technology (foreign capital was largely out of the question). He said in 1956:

"We must firmly reject and criticise all the decadent bourgeois systems, ideologies and ways of life of foreign countries. But this should in no way prevent us from learning the advanced sciences and technologies of capitalist countries and whatever is scientific in the management of their enterprises. In the industrially developed countries they run their enterprises with fewer people and greater efficiency and they know how to do business. All this should be learnt well in accordance with our own principles in order to improve our work.” 1

1.2.2. From Self-reliance to the Four Modernization Programme: 1958-1978

New China achieved a spectacular rate of growth during its First Five-year Plan. National income grew 8.3 per cent annually. The prospect of further growth was however threatened in 1957 when the Soviet Union refused to provide further aid to China. In August of 1960, the Soviet Union suddenly withdrew all its personnel, leaving many major Chinese construction projects paralysed in a short period. China thus lost its only alliance abroad.

In response, on the one hand, China was forced to diversify its foreign trade. The share of the nine Soviet bloc nations in China’s foreign trade dropped from 65.3 per cent during 1950 to 1959 to 24.6 per cent during 1960 to 1971. Whereas the share of western countries increased from 5.8 per cent to 19.3 per cent, and the share of other countries, mainly Asian countries, rose from 28.9 per cent to 56.1 per cent, during the same period.2

On the other hand, China's leadership advocated a policy of self-reliance. China's foreign trade almost stagnated in real terms, amounting to US$3,810 million in 1960 and US$6,000 million in 1972, respectively, at current price. As Thomas Tsao correctly pointed out, however, self-reliance for China was not autarky, but reduced effort to seek foreign cooperation for economic development.¹

The overall economic development nonetheless continued to follow the Soviet Union style. Investment was heavily leaned to heavy industries, while agriculture and light industries were to a great extent neglected (this situation is sometimes referred as the "industrial disproportion.").

In order to finance the capital-intensive heavy industries, emphasis was laid on accumulation rather than consumption. As a result, people's living standard experienced slower improvement, compared to economic growth (this situation is sometimes referred as the "structural disproportion.").

As the destructive Cultural Revolution, which started in 1966, dragged on, the economy was on the edge of bankruptcy by early 1970. Moreover, the ideological disillusion following the Cultural Revolution also increased pressure on the Government from the public for the improvement of material lives.

Abroad, on the one hand, China had a military clash with the Soviet Union in 1969, and thus felt acutely the need to strengthen its defence capacity. The clash also prompted the Government to adopt a more cooperative attitude towards western capitalist countries, particularly the United States. Following the signing of the Shanghai Communique in 1972 and the normalization of the US-China relationship, China was granted the most-favoured-nation trading status by the US. Shortly afterwards, China was also admitted into important international organizations such as the World Bank and the IMF. On the other hand, the export-oriented economic strategy adopted by the four small Asian countries, including South Korea, Hong Kong, Taiwan and Singapore, and their speedy industrialization provided encouraging examples. The conditions for a new economic policy were thus ripe.

¹. Ibid., p. 86.
The period from 1972 to 1978 was one in which the Chinese leadership began to not only appreciate the need for a more pragmatic and outward-looking strategy to develop its economy, but also actively sought for such a strategy. In January of 1975, then premier Zhou Enlai reported to the Fourth National People Congress his Four Modernization Programme.\(^1\) The Four Modernizations include the modernization of industry, agriculture, national defence, science and technology. It was rather clear to the Chinese leadership that the import of foreign machinery and technology was necessary to implement such a programme. The underlying question was how this import should be paid for.

At the time, the Chinese leadership maintained that increased imports would be paid for by increased exports. China’s exports increased steadily from US$ 3.2 billions in 1972 to US$ 7.2 billions in 1978. In comparison, China’s import increased from US $ 2.8 billions in 1972 to US$ 7.4 in 1974. The import of capital goods increased from US$ 445 millions in 1972 to US$ 2210 millions in 1975.\(^2\) But the period was characterized above all by massive imports of complete so-called 'turn-key' plants, an estimated amount of US$ 2,632 millions was spent on purchasing complete plants.

The need for imported goods was so great and the imports increased so fast that China’s balance of payments position was threatened. A particular worrying sign appeared in 1974, when China’s trade balance with non-communist countries registered a record deficit of US$ 1.2 billions. Serious doubts arose among the leadership about the feasibility of the strategy. Subsequently, China’s import slowed down in 1975 and 1976.

However, China’s imports picked up again strongly in 1977, and continued to grow in 1978. Contracts on large complete plants were again negotiated and signed, and a series of trade missions were sent abroad and welcomed in China. The Ten-year plan (1976-1985), announced in February of 1978

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by then premier Hua Guofeng, provided much of the impetus for the renewed import wave.

The plan was extremely unrealistic. It was planned that farm mechanization was to be basically accomplished by 1980, steel production was to rise from 24.7 million to 60 million tons, and oil production from 93.9 million to 250 million tons during 1976 to 1985. Construction or expansion was planned for 120 projects in the period. Contracts were signed with foreign companies for the import of 22 major projects on loans that were much too large for China to repay in a short time. In the meantime, domestic consumption was squeezed to support a high accumulation rate, which increased from 31.1 per cent in 1976 to 32.3 per cent in 1977 and 36.5 per cent in 1978. It was estimated that China was US$300 billions short of the capital needed to finance the Ten-year plan.

An unprecedented feature of the years between 1977 and 1978 was that use of foreign credit was no longer seen as prohibited. On the contrary, there was "the illusion that the country could do a speedy job of modernization by relying on foreign loans and imported equipment and technology." The years of 1977 and 1978 represent such a dramatic change in the Chinese government attitude towards foreign capital and technology that it has been called as the "Great Leap Outward" years, after the "Great Lead Forward" years during 1958 to 1960.

By 1978, however, the growth of imports was so great that there was again an alarming deficit, in total US$1.17 billions. A re-assessment was called for. A decision was made to discipline imports more carefully in the future. The Chinese leadership also recognized that the construction of Four Modernizations would be impossible without the utilization of foreign capital and technology; but on the other hand, it was unrealistic to count solely on the latter, and reform must be made on the economic system to unleash the intrinsic advantages presumably embodied in the socialist system.

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These new lines, summed up as "invigorating inside, opening to outside", were officially endorsed by the Third Plenary Session of the Eleventh Central Committee of the CCP in December of 1978. The Plenary marked a turning point in China's contemporary history, because, on that occasion, the CCP officially declared that economic construction, rather than class struggle or anything else, was going to be its central concern and committed itself to work whole-heartedly for it.

The year of 1979 witnessed some of the historical events in China's new economic era. The Law on Joint Ventures Using Chinese and Foreign Investment\(^1\), the first of this sort in China's history since 1949, was promulgated early that year. In December, the leading Group Office of Economic System Reform of the State Council laid down the basic principles of the economic reform.\(^2\)

1.3. Economic Reform and Open Policy since 1979.

In the Republic's thirty-year history before 1979, the party and the government had attempted to reform its economic setting a number of times. The Leading Group of Economic System Reform records these previous reforms as follows:\(^3\)

The first reform took place in 1954, in which the six large regional administrative bodies were abolished, and economic management was centralized. By 1957, centrally allocated products were over 500, and more than 90 per cent of planned capital construction was under the control of ministries in the central government.

Then problems derived from over centralized economic management prompted the second reform attempt in 1958, which emphasized the expansion of local authorities' power. Centrally-administered enterprises decreased from over 9000 in 1957 to some 1000 in 1958, the number of

\(^{1}\) This law applies to equity joint ventures.
centrally-allocated products was reduced to just over 100. Half of the planned capital construction came to be under the control of local authorities. The state-owned enterprises were allowed to retain some of their profits. Coupled with the chaotic "Great Leap Forward" movement, however, the reform had disastrous consequences, whose impacts can still be felt today, most noticeably in the disproportion between relatively overdeveloped heavy industry and underdeveloped agriculture and light industry, and between high rates of investment and slow improvements in living standard.

Starting from 1961, economic management was re-centralized. By 1963, the number of central-administered enterprises was increased to more than 10,000, and centrally-allocated products were again numbered as many as over 500.

After 1966, particularly around 1970, however, decentralization policy was once more adopted. Even some of the largest state-owned enterprises, such as Daqing Oil Complex and Anshan Steel Corporation, were delegated to the local authorities to administer. Tragically, this decentralization again coincided with a tumultuous political and social conditions, the Cultural Revolution this time. By the end of the Cultural Revolution in 1976, the economy was on the edge of bankruptcy. So in 1976, when the new leadership assumed authority after the death of Chairman Mao and Zhou Enlai, centralization regained supremacy for the third time in the Republic's history.

In retrospect, the State Economic System Reform Commission, then the Leading Group of Economic System Reform, reckoned that there were three shortcomings in the reforms before 1979: first, too much emphasis was laid on the relationship between the state and the localities, while the real issue was the relationship between the state and enterprises; second, too much importance was attached to administrative means, while the solution lay in economic means; and third, planning and preparation were often inadequate.

It was therefore decided that the central matter of this reform would be to re-shape the relationship between the state and enterprises, mainly state-owned enterprises, and change the enterprises from mere appendage to the
state to independent economic institutions. The enterprises were to be given more power on matters such as planning, marketing, procurement, financial management, wages, pricing and so on. 1

1.3.1. Salient Features of China’s Economic Reform

China’s economic reform started in the countryside, just like the Chinese revolution. A "household production responsibility" system, whereby members of a production team were subdivided into groups (often individual household) to fulfil production quotas and get extra rewards for over-fulfilment, was initiated in the countryside in early 1980. By the end of 1982, production responsibility had been implemented in 92 per cent of all production teams in the country. 2 The ratio rose to 97.9 per cent by 1984.3

In the meantime, experiments in increasing the autonomy of state-owned enterprises through economic responsibility system were carried out in industry and commercial sectors across the country, although from 1979 to 1981, the Chinese leadership’s attention was mainly caught by the readjustment program to remedy the disproportions in the economy. It was not until 1982 that the master plan of economic reform was finally mapped out. The overall objectives of the reform were stated as follows:

1). To change the ownership system from the present one (over-dominated by state ownership) to one in which the state ownership co-exists with other forms of ownership;

2). To change the decision-making system from the present (unduly over-centralized) to a multi-level decision-making system which, whilst maintaining the supremacy of the state, allows a combination of decision-making by the state, localities, economic organizations and labourers;

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3), To change the control system from the present one (mandatory plans) to one which, whilst maintaining the supremacy of state planning, gives full play to the role of other economic instruments (eg. taxation), economic regulations and supervision.

4), To change the distribution system from the present egalitarian one to one which, whilst protecting the state interest, links the interest of economic organization and labourers more closely to their performance;

5). To change the management of the economy from the present one which chiefly relies on the Party and the government organs through administrative means to one which, whilst strengthening guidance by the party and the government over the lines and directions of economic development, chiefly relies on economic institutions through economic means to meet the requirements of economic activities.¹

It is evident from this master plan that the Chinese economic reform was going to be preoccupied with the relationship between the state and localities, economic organizations and workers, rather than be concerned with creating a market-oriented mechanism for efficient resource allocation.

In practice, reform has taken place in various fields. First, a more diversified ownership pattern has emerged. In particular, collective ownership experienced dramatic growth.² For instance, collectively-owned enterprises came to account for 36 per cent of China’s gross industrial output in 1988, while its share in 1978 was only 19 per cent. In contrast, the share of state-owned enterprises in China’s gross industrial output had dropped from 81 per cent to 57 per cent during the same period. Individual ownership (ie., self-employed) mushroomed. In the meantime,

² There are basically three types of ownership in China (excluding foreign ownership): state ownership, collective ownership, and private ownership. State-owned enterprises are owned by the State and sometimes administered by relevant ministries, although sometimes the administration is delegated to local governments. They are often subject to State Plans. For collective-owned enterprises, see footnote 1 on p.13.
new forms of ownership, such as foreign ownership, have emerged. But private ownership is still very limited.

The growth of rural collective enterprises is particularly significant. About one-third of the net increase of China's gross industrial output during 1978-1988 has come from the growth of rural collective enterprises, including both the enterprises owned by township and villages authorities.

Second, a great deal of effort has been put into making enterprises independent and properly motivated to improve economic efficiency. This has been done through different forms of responsibility system, which link enterprise interests with responsibility to the state: in the countryside, the household production responsibility system had covered 98 per cent of peasant households by 1987; economic responsibility system was implemented in 80 per cent of the centrally-planned industrial enterprises and 35 per cent of the independently-accounted commercial enterprises by 1983.1

By 1987, over 60 per cent of small-scale state-owned commercial enterprises had been leased to individuals or groups of individuals to manage.2 Since 1983, state-owned enterprises no longer had to submit their entire profits to the government; instead they pay income taxes to the governments and can keep most of the rest of their profits for development of the enterprise and welfare of the employees. Unfortunately, however, the success of agriculture reform has not been repeated in other fields to the extent that the government would like to see. It seems that re-defining responsibility and rights alone between the state and economic entities, which work well in agriculture, can not provide adequate motive and mechanism by which the industry and commerce can achieve better efficiency.

Third, the mechanism of market started to play an important role. By the end of 1986, the number of products which were covered by central

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planning had been reduced from 120 to some 60, the share of these products in China's gross industrial output had declined from 40 per cent to 20 per cent. The number of centrally-allocated intermediate products was reduced from 256 to 20; and 65 per cent of agricultural and sideline products, 55 per cent of industrial final consumer goods, and 40 per cent of industrial intermediate goods were traded under floating or free-market rather than fixed prices.¹

But the price of a number of key industrial materials and the majority of public utility services are still not determined by the market. Since the price of other goods has risen fast, the state has to provide an increasing amount of subsidies for these goods and services, which has caused many problems.

Fourth, economic institutions such as banks started to play an increasingly important role, while the role of the party and the ministerial organs in the management of the economy has been lessened. However, the role of local governments has increased as a result of administration decentralization.

1.3.2. China's Open Policy

The so-called open policy has a wide range of implications. Deng Xiaoping points out that it includes two principles: first, it lays special emphasis on openness to the western capitalist world in order to gain access to advanced technology and foreign capital, while contact with other socialist countries should be expanded; second, it means the notion of "one country two systems".² But the core of the open policy is to utilize international capital and advanced technology to help China to develop the economy.³

Given the fact that China has never stopped importing foreign technology, even during the Cultural Revolution, the policy of encouraging FI, particularly DFI as so stressed, lies in the centre of the open policy. By the

². Shanghai, *Shijie Jingji Daobao* (*SJD*), World Economic Herald, 20 Aug., 1984. The notion of "one country two systems" refers to the idea that the unification of the mainland with Hong Kong and Taiwan is to be achieved by allowing Hong Kong and Taiwan to maintain their capitalist system, while the mainland continue to pursue its socialist road.
mid-1980s, the majority of the Chinese leadership was no longer feeling uncomfortable with the fact that China could not claim to be a debt-free country any more. The logic had been changed: Deng Xiao-ping was reportedly saying that, since the time of Marx, the ultimate test of any social system is its ability to develop the economy and to raise the living standard of its citizens. It is therefore only legitimate for the Chinese Communist government to employ any means to do this. The question that needs to be asked is then whether such a policy can achieve what is expected on it.

1.4. Conclusion

This chapter has attempted to show the historical process in the changes of attitude of the CCP towards economic matters in general, and foreign capital and technology in particular. It can be seen that the attitude towards foreign capital experienced a gradual change from principled to pragmatic, as the CCP transformed itself into a ruling party: FI was regarded as representative of foreign imperialism and therefore the enemy of the Chinese revolution in the 1930s, but came to be welcomed in the 1940s shortly before the liberation. Moreover, although historical events prior to the 1970s had made it impossible for China to absorb foreign capital, the government, except under extreme circumstances such as during the Cultural Revolution, had been usually keen on foreign technology in order to strengthen the Chinese economy.

On the other hand, however, it is also evident that the CCP has never been unconditionally committed to foreign (or indeed any sort of private) capital: when it was necessary (as during the Korean War), the Party did not hesitate to take actions to control the latter.

From an historical perspective, the present liberal approach is essentially a restoration of the policy that the party adopted in early 1950s. On both of the occasions, the party was compelled to do this by the need for political survival. The difference however is significant: the present policy includes a very important external factor. Indeed the new policy is partly rooted in the changes that have taken place in international politics and economy, although pressure from the public for better living conditions produced the political will to adopt such a policy.
What can be expected from the implementation of such a policy? Or more specifically, can the inflow of DFI bring about the changes that are desired by the CCP and the Government? What cost will be involved in the process? To provide a theoretical perspective, the next chapter will discuss theories of DFI, particularly its host country impact, and the implications for China’s DFI policy. It will also briefly discuss the method to evaluate the effectiveness of the policy.
CHAPTER 2. BACKGROUND THEORIES AND EVALUATION METHODOLOGY

Two of the most important questions about DFI are: first, what are the determinants of the industrial and geographical flows of DFI? second, what is the impact of DFI on host countries? As far as this thesis is concerned, the principle concern is with the second question.

2.1. Determinants of DFI

There are a number of theories that attempt to explain the industrial and locational determinants of DFI. The most comprehensive thesis is J. Dunning's "Three-A" framework.¹ This theory incorporates three strands of economic theory in explaining international production through DFI, namely, firm-specific advantages under monopolistic competition of industrial organisation theory, the advantage of internalisation and location-specific advantage derived from location theory.

The principal hypothesis is that a firm will engage in DFI in certain location if three conditions are satisfied:²

1). It possesses net ownership advantages vis-a-vis firms of other nationalities in serving particular markets. These ownership advantages largely take the form of the possession of intangible assets, which are, at least for a period of time, exclusive or specific to the firm possessing them;

2). Assuming condition 1) is satisfied, it must be more beneficial to the enterprise possessing these advantages to use them itself rather than to sell or lease them to foreign firms, that is, for it to internalise its advantages through an extension of its own activities rather than externalise them through licensing and similar contracts with independent firms;

². Ibid., p.79.
3). Assuming conditions 1) and 2) are satisfied, it must be profitable for the enterprise to utilise these advantages in conjunction with at least some factor inputs (including natural resources) outside its home country; otherwise foreign markets would be served entirely by exports and domestic markets by domestic production.

These three groups of advantages are termed as ownership-specific advantages, internalisation advantages and location-specific advantages, respectively. The theory can be therefore conveniently termed as "3-A" framework. Although the emphasis of the eclectic theory as a whole is on the source firm (and home country), Dunning provides a comprehensive survey of the location-specific factors that influence the flow of DFI, including:

- Spatial distribution of inputs and markets;
- Input prices, quality and productivity, e.g. labour, energy, materials, components, semi-finished goods;
- Transport and communication costs;
- Government intervention: control on imports (including tariff, barriers), tax rates, incentives, climate for investment, political stability, etc.
- Infrastructure (commercial, legal, transportation)
- Psychic distance (language, cultural, business, custom etc.)
- Economies of R&D production and marketing (e.g. extent to which economies of scale make for centralization of production.)

(Ibid., p. 81)

In connection to China, this theory points to two main advantages that China offers as a host country: its existing market and market potentials, and its abundant low-cost labours. It suggests that, in order to attract DFI, a host country must provide certain necessary conditions such as infrastructure. As a matter of fact, the provision of a reasonably good infrastructure entails a major cost for a developing host country. The theory also predicts that the source of DFI in China will mainly countries that are in various ways close to China.
2.2. DFI’s Impact on a Host Country

What, from a theoretical point of view, is the impact of DFI on host countries? This simple question is surrounded by a great deal of controversy. Different writers often have very different things to say on this question. A number of writers such as Lall, Emmanuel, Hood and Young, Jenkins and Biersteker have attempted to identify these perspectives.¹

The controversy arises mainly from three sources: first, there are different subjects on which the impact of DFI is examined by different writers. While some writers confine to the more direct impact on, for example, technology, employment, market structure, balance of payments, etc., others consider wider implications such as class structure, socio-political consequences, and so on.

Second, there exists an epistemological difference between neo-classical and Marxist writers. Although they are from not entirely different theoretical traditions, they often have different values and political agenda. On the one hand, neo-classical economists are preoccupied with the issue of efficient resource allocation. Host country impact is usually not separately discussed. Rather it is often treated as a by-product of overall efficiency, by assuming that the host country would share in it.

On the other hand, Marxist political economy emphasizes the interaction between economic infrastructure and socio-political superstructure. In general, Marxist writers attack the exploitative nature of capital, particularly monopoly capital, and its consequent socio-political order. Some Marxist writers however recognize the progressive role that foreign

capital plays in advancing the development of productivity in the recipient less developed countries.

Third, theorists can still have different views on the subject, depending on their emphasis on the specific aspects of DFI and the market within which DFI is operating.

For example, among the contemporary neo-classical writers, there are considerable differences of views, depending on whether market imperfections, which are often regarded as the origin of DFI, are assumed to be endogenous or exogenous. One perspective emphasizes that transnational corporations (TNCs), that make most of DFI, create market imperfections through DFI in order to achieve excessive profits. This perspective finds its origin in the seminal dissertation by Stephen Hymer (1976) in the later 1960s, which emphasized the monopolistic nature of the TNCs that have made the major part of DFI. ¹

The other perspective stresses that market imperfections result from natural causes and governmental interventions, and that the TNCs overcome these imperfections through DFI to achieve economic efficiency. This perspective, which represents the theoretical mainstream, might be described as an orthodox neo-classical position.

Similarly, there are also divergent perspectives within the Marxist approach. One perspective stresses the monopolistic nature of foreign capital, and denies that it can enhance the development of productivity in the host country. This perspective is very closely related to the dependency theory, but goes beyond the latter. It claims a theoretical origin in Lenin’s famous work, Imperialism: the Highest Stage of Capitalism ², but has added new elements. It is therefore referred to as neo-imperialist.

The other perspective within the Marxist approach acknowledges that foreign capital can help the development of productivity in the host country, although the nature of development is capitalist (i.e., it inevitably

². N. Lenin, Imperialism: The Highest Stage of Capitalism, Moscow, Progress Publisher, 1971.
entails the problems of capitalist society.). This perspective has followed the earlier writing of Marx so that Biersteker (op. cit.) refers to it as classical Marxist.

There may be intermediate perspectives, such as the 'nationalist approach' by Lall (op. cit.). They often have, however, similar theoretical stands to one of the above perspectives.

The following is organized by topics. Possible host country impact is discussed from the point of views of different theoretical perspectives, under four headings: resource transfer impact; terms of trade and balance-of-payments impact; market structure and efficiency impact; and socio-political impact.

2.2.1. Resource Transfer Impact

2.2.1.1. MacDougall's model: real income effect

Presumably, DFI involves a transfer of foreign capital into the host country, although it has been argued that the inflow of foreign capital is small, and that DFI is often financed by funds drawn from the host country market. Whether DFI involves a substantial inflow of foreign capital is an empirical matter, however, while the consequence of the inflow of foreign capital, if it does exist, is a theoretical issue. It is the latter that we are concerned with here.

Such a theoretical analysis has been attempted by MacDougall (1960)\(^1\). His analysis is based on the classical international capital flow theory in the sense that he does not distinguish DFI from portfolio investment, and assumes the movement of capital determined by the difference in interest-rates between the home country and host country, from the lower interest-rate country to the higher interest-rate country.

MacDougall constructs a model which relates physical capital stock and physical marginal product of capital in the host country in a two-dimension graph to analyze the effects on the real income of a recipient country

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(Australia) by more or less foreign owned private capital in the country at a point of time. He starts with a number of assumptions, including full employment, constant return to scale, non-existence of external economies, perfect competition and no taxation. It is also assumed that both the size of the labour force and domestic capital stock are independent of the foreign capital stock, and that DFI has no effects on both the host country’s terms of trade and balance of payments.

He shows then that, as a result of increased foreign capital flow, the host country’s marginal productivity of capital falls, marginal product of other factors of production, particularly labour, rises, and a larger output is produced. The fallen marginal product of capital results in a loss of income on the "old" foreign capital, but a gain to the domestic complementary factors of production. Whereas the additional output consists of two portions: the major portion goes to the foreign investor as returns to capital, while the minor portion goes to the domestic complementary factors of production, and constitutes another kind of net gain to the host country.

MacDougall regards the second gain as negligible, however. This is because his analysis deals with the effects of more or less foreign capital rather than total stock of foreign capital.

When the effects of the total foreign capital stock is concerned, nonetheless, the implications are quite different. In this case, there is no 'old' foreign capital, and consequently no gain to complementary domestic factors due to the lowered marginal product of capital. The additional output, net of returns to foreign capital, constitutes the sole gain to the host country. This is shown by T. Parry 1, who modifies MacDougall’s model to analyze the host country impact of having foreign capital or not.

It is apparent that, by assuming the existence of unemployment, which is more realistic, the benefits from foreign capital to the host country tend to increase. This is because the inflow of foreign capital puts the unemployed factors of production to use and creates new wealth rather than only raising

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the returns to complementary factors of production which were already employed in the economy before the inflow.

Further more, by imposing taxation on foreign profits, the host government can increase its revenue as long as the taxation does not reduce the further inflow of DFI.

MacDougall also considers the possible effect that the inflow of foreign capital might have on the domestic capital stock, and suggests two possibilities. The first one, the more likely, is a higher domestic capital stock related to the overall higher income level associated with the inflow of foreign capital. The second one is also possible, that is, that the inflow of foreign capital might be fully offset by a reduction in the domestic capital. This second possibility depends largely on how the income resulting from FI is distributed. Take an extreme example: FI might consist of purchases of existing domestic assets, and the proceeds might be spent on foreign consumption goods, which were previously inaccessible, rather than becoming savings. The inflow of foreign capital would then be fully offset by a reduction in the domestic capital stock. Consequently, the real income of the host country would be lower than without the inflow of foreign capital in the future, since a larger portion of the income accrues to foreign investors.

Another relevant possible impact that MacDougall considers is on the external economies of scale which might result from the inflow of foreign capital. Then DFI's contribution to the host country would be further increased, since economies of scale mean that the same output can be produced now with less inputs, or a large output can be produced with fewer inputs. But the host country could be worse off, if the economies of scale is biassed to labour-saving, and if the ratio of foreign capital to total capital stock is significant, because it would lead to a reduction in the wage bill that can't be sufficiently offset by increases in domestic capital's gains. At the least, labour-saving economies of scale would have an impact on the distribution of income in the host countries, and vice versa. It is obvious also that labour saving effect related to economies of scale would have a more significant implication when unemployment is allowed for.
MacDougall also considers the external economies related to the transfer of know-how from the foreign to the local firms. This issue is more appropriately considered in the market imperfection framework, thus will be discussed later.

In sum, according to MacDougall’s analysis, as far as the inflow of foreign capital and only this inflow is concerned, given perfect competition, the host country could benefit through three items: first, a larger real income if the domestic capital stock does not contract as a result of this inflow, and/or the domestic capital gains exceed labour’s loss when there are economies of scale biased to labour-saving; second, taxation on foreign profits; and third, increases in the wage bill or returns to other factors of production. This last item is more significant when there is current unemployment.

However, MacDougall’s analysis is incomplete, because on one hand it puts too much emphasis on the transfer of capital through FI. The contemporary thinking about DFI has a rather different emphasis. It considers that DFI involves not only a transfer of capital, but also a number of other elements, particularly technology. On the other, it does not raise the issue of cost of inducing and accommodating foreign capital for the host country.

2.2.1.2. Industrial organization approach: transfer of technology

The contemporary theory of DFI starts with a recognition of market imperfections, particularly the imperfections in the technology market. Market imperfections provide both the necessary and sufficient conditions for undertaking DFI: first, without market imperfections, there would be no incentives for investing firms to create an internal market through DFI, since all transactions could be carried out smoothly in an external market; secondly, without market imperfections, investing firms would not have advantages over foreign firms, which is necessary for the success of investing firms in a foreign market.

Hymer (1976, op. cit.) thinks that the aim of DFI is to control the foreign operation by the investing company. He states that control is desired "in order to remove competition between the foreign enterprise and
enterprises in other countries...or to appropriate fully the returns on certain skills and abilities." (p. 23).

He relates these skills and abilities (or advantages) to structural market imperfections resulted from ownership of patents or secrets, economies of scale, ability to hire factors of production cheaply, and product differentiation.

When transferred, these skills and abilities are difficult to evaluate by buyers. Particularly when there is a possibility that both the seller and the buyer of these assets are involved in an existing or potential oligopolistic market, the transfer of these assets can be more profitably carried out in an internal market through DFI. The other reason for making DFI is to remove competition from a foreign producer through common ownership. It is apparent that Hymer attaches considerable importance to the monopolistic nature of the investing firm both in product market and technology market. In being a means of monopolistic or oligopolistic control, DFI hampers economic efficiency, and yields little benefit to the host country. Some writers continue this emphasis.

Aliber substantiates Hymer's suggestion that one advantage that investing firms have is to be able to have better access in the financial market, by proposing a 'currency area theory'\(^1\). He suggests that TNCs are usually from countries that have a hard currency, and because of that, they enjoy a premium in the capital market, and are able to borrow more cheaply than local firms in the host countries. This happens because the lenders tend to relate the borrowing of the TNCs only to the exchange rate risk of their home country currency rather than the host country currency. His theory is however often criticized as putting too much emphasis on the financial aspect of DFI, since the contemporary thinking stresses more the aspect of technology transfer rather than the transfer of financial resources.

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On the basis of an analysis of over one hundred large American TNCs, F. T. Knickerbocker suggests that there is a "bunching" pattern in which these companies make DFI. They follow each other into new foreign markets in order to undermine any advantage the other oligopolists have. The implication of such a suggestion is that the entry of these firms through DFI could lead to a transplanting of oligopolistic market structure on one hand, and on the other hand might leads to market fragmentation, if the host country market is relatively small. Therefore this would cause efficiency-loss in terms of economies of scale in a host country.

The mainstream writers have however moved in another direction. Paradoxically, they also relate to Hymer's work. This is because Hymer also contributes another important tenet of modern theory of DFI, that is: in order to compete successfully in a foreign market, the investing firms must possess certain advantages over foreign firms. Unlike Hymer, the mainstream writers tend to relate these advantages to market imperfections resulted from external causes, and regard the internal market created through DFI as a device to improve efficiency.

Kindleberger suggests that, in addition to the market imperfections that Hymer has identified, government interference causes another major kind of market imperfection, including tariff, taxation and interest difference, exchange rate risk, and so on.2

Johnson considers that a significant advantage that some firms have is knowledge, which has the characteristic of a "public good" within the firms, ie., it can be exploited by a subsidiary of the parent firm without any additional cost to the parent or to the subsidiaries already exploiting it.3

The more recent development, embodied in the concept of internalization, emphasizes the advantage derived from the internalization of a market

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through DFI by TNCs. It is reckoned that benefits stem from the avoidance of imperfections in the external market.

Buckley and Casson\(^1\) think that there are at least five such imperfections, including lack of a future market in some activities, the need and difficulties for companies to impose discriminatory pricing, cost of bilateral bargaining, buyers' uncertainty, and government interventions in international transaction. The last type of market imperfection makes the use of transfer pricing particularly useful in achieving profit maximization for TNCs. They also predict that the greatest benefits can be achieved in the market of knowledge, where buyers' uncertainty is greatest in an external market. It is also advantageous in the markets involving perishable agricultural products, intermediate products in capital-intensive manufacturing processes, and materials whose deposits are geographically concentrated.

Internalization theory has little to say about the host country impact, except that DFI entails the transfer of superior technology (and management skills) to the host country, which otherwise would not happen due to market imperfections.

Technology transfer has gained such an important place in the arguments for DFI that much has been written on it. Its definition is often varied with different writers. Hood and Young (1980, *op. cit.*, p.48) have given a broad definition to"include production secrets, management organisational techniques and marketing skills." This is the definition that this thesis adopts.

Presumably, transfer of technology means two things: firstly and directly, superior technology is being used in the foreign firms associated with DFI, and that better or new products are being provided to the consumers at lower prices in the host country, and higher returns are received by complementary factors of production; secondly and indirectly, the superior performance of these foreign firms generates spill-over effects among local firms either through competitive pressure in the same industries, or by backward and forward linkages.

However, the higher productivity of the foreign firms associated with the superior technology will not necessarily mean that the host country will benefit. H. G. Johnson (1970, *ibid*) has shown that, given constant terms of trade, if the returns on the superior technology is entirely absorbed by the foreign companies through monopolistic profits, the prices of commodities to consumers and the prices of factors of production in the host economy remain unchanged, then there is no direct benefit to the economy. The only benefit that the host country can possibly get is through taxation of the foreign companies’ profits. But due to some of the accounting procedures that TNCs employ, particularly transfer pricing, foreign firms are able to move profits around. The ability of the host government to reap benefit through taxation is therefore limited.

But what will happen if the TNCs fail to appropriate the whole of the monopoly rent on superior technology? Johnson (*ibid.*) suggests that, if FDI tends to flow into the more capital-intensive sector of the economy, and if higher productivity is reflected in changes in the general levels of factor prices, rather than in premium prices for the factors employed by foreign companies, the effect of an inflow of foreign capital will be to raise the rate of return on capital and reduce the wages of labour. That is to say, DFI could lead to a redistribution of income from labour to capital.

There is even a possibility that the host country might actually lose as a result of the inflow of the DFI, if the increased output is largely export-oriented, and that creates such a deterioration in the terms of trade of the host country that the gains from the increased output are more than offset by the relative changes of the price. The inflow of DFI therefore result in an immiserizing growth.\(^1\)

The theme that, in order to compete successfully, an investing firm must have certain advantages over its competitors, has strongly influenced studies on TNCs from less developed countries. Since the 1970s, this group of TNCs has grown. In fact, in China, the bulk of DFI has come from TNCs in less developed countries.

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The focus of attention on the growth of the "new multinationals" has been to identify the specific advantages that these TNCs have over their local competitors, but more importantly, over competitors from more developed countries, i.e., the so-called "old multinationals". But there is considerable difference of views on the source of these advantages among writers, particularly about their technological advantages.

Wells maintains that "most foreign investors from developing countries derive competitive advantages from the technologies that enable them to manufacture at low cost", and that "these technologies involve small-scale, flexible, labour-intensive plants and, frequently, considerable use of local inputs."\(^1\) So the advantages seem to lie in the adaptation of these technologies to the conditions in the host countries. Whereas Lall disputes this small-scale, labour-intensive generalization of these investments, and suggests that these firms' proprietary advantages derive from the scope offered by the "localization" of technical change and the "irreversibility" of such changes.\(^2\) In another word, these new MNCs serve to fill certain market opportunities left open by the dominant TNCs from the developed countries. Other competitive advantages suggested include marketing skills involving more direct interaction with customers rather than mass advertising like the old TNCs, cheap management costs, and experience in operating in third world environment, and the benefit of ethnic connections, although disputes about them are also very intense.\(^3\)

From the above discussion, it is clear that, from whatever perspectives, researchers have largely agreed upon one point: DFI does offer certain advantages, either technical or managerial, to the host countries. On the other hand, DFI is more a transfer of technology than a transfer of financial resources to the host countries.

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2.2.2. Trade and Balance of Payments Impact

DFI could have some impact on the host country's trade and balance-of-payments position. It has been usefully suggested that the effects of capital inflow upon the balance of payments can be divided into three parts: first, the initial flow of capital to finance the new investment and its effect upon the major items in the balance of international transactions; second, the subsequent changes, after the new productive facilities are in operation, in exports and imports due to the demand for current inputs and the supply of current output; and third, the eventual remittance of profits, interest, dividends, royalties, management fees, and perhaps also principals. The adverse impact of the last part is self-evident, unless it stimulates even more DFI.

In relation to the question of initial effects of capital inflow, there is a need to distinguish the part of investment financed within the host countries, and the part of investment brought into the host country. The effect of initial capital inflow is also related to how the investment is actually made up. Its favourable effects on the capital account are reduced if the investment is largely made in forms of imported capital goods (MacDougall, 1960. op. cit.).

J. O. N. Perkins has offered a careful consideration of the subsequent impact on the host country's exports and imports, associated with the inflow of DFI. He suggests that DFI is likely to increase a host country's imports of capital goods and input items, particularly when the host country is less industrially developed and has to depend on imports for these goods. But if the production of DFI is import-substituting, DFI may reduce the import of finished goods. On the other hand, DFI of certain types is likely to increase the exports of the host country. This is particularly significant when DFI is made in countries with lower cost labour (and where certain other costs may also be lower), but lack know-how and capital. The combination of local labour resources, foreign

2. Ibid. p.305.
technology and capital could have a positive effect on the expansion of a host country's exports.

Besides the separate impacts on the trends of imports and exports in the host country, there is also a question of the impact on the terms of trade. The magnitude and direction of the impact depends largely on the changes in the size and structure of the host country's exports and imports, associated with the inflow of DFI. If the increase in exports happens largely in the products where the host country was already a major supplier before the DFI, then the increased supply resulted from the DFI could create a deterioration in the terms of trade of the host country.

This means that export-oriented DFI might cause a negative effect on the host country’s terms of trade and ultimately its real earnings from foreign trading, if the production is too narrowly concentrated in certain products.

2.2.3. Structural Changes and Efficiency

2.2.3.1. Market structure

Among the mainstream writers, the focus of discussion on the structural effects of DFI in the host country has been on market structure. The central issue is whether the inflow of DFI decrease or increase market competition.

The conclusion in relation to that issue depends largely on the nature of the foreign investing companies on the one hand, and on the other, on what the initial market situation in the host country was before the inflow of the DFI.

If, as the industrial organization perspective claims, the TNCs engage in DFI in order to remove competition, then the inflow of DFI would tend to increase market concentration and decrease competition. Moreover, the rent that the TNC earns from its monopolistic market position may cause mis-allocation of domestic resource, and lead to even greater loss to the host country.
And if TNCs do behave oligopolistically, by bunching their investment in the same foreign market, locating inefficient small-scale plants and producing at high cost levels, they are again likely to cause efficiency loss. It is however argued that market fragmentation is often associated with tariff protection\(^1\).

If there was already a highly concentrated market, the entry of DFI is bound to bring in new competition, since TNCs are in a much more powerful position compared to domestic firms, due to their various forms of advantages. But as time passes, it is also likely that these foreign firms would gradually expand their market share and maybe give rise to new market concentration.

It is sometimes suggested that an acquisition of existing firms by foreign investors is more likely to increase market concentration, compared with a new establishment by foreign investors, since the former might result in a more powerful position by combining the advantages of foreign firms and indigenous firms.

In relation to socialist countries, particularly those that have attempted to reform their economic system by introducing the mechanism of the market, an important question is: "how does the inflow of DFI and the operation of these firms affect the establishment of a market mechanism?". Unfortunately, to date, there seems to be no such theoretical work on this question available. It is hoped that this study of DFI in China might shed some helpful light on this issue.

The inflow of DFI could have other structural impact, however; for example, the impact on the change in the industrial structure of the host country. This is a particularly relevant issue in relation to a developing country.

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2.2.3.2. Industrial structure

The neo-classical Rybczynski theorem\(^1\) states that, in a classical two factors and two products model, the growth of one factor of production must always lead to the absolute increase in the output of the commodity which uses intensively the growing factor, while resulting in the absolute decrease in the output of the other commodity which uses intensively the non-growing factor. In relation to the growth of capital stock associated with the inflow of DFI, the implication is that the output of capital-intensive goods would tend to increase, as a result of the inflow of DFI. Or if we emphasize the transfer of technology more than the transfer of capital through DFI, the result is similar: the technology-intensive production tends to grow.

The so-called Japanese school argues, however, that this direction of change can and should be altered. While industrial organizational approach and internalization theory are both micro-economic in nature, the Japanese school is a macro-oriented approach, which is closely associated with the name of Kiyoshi Kojima.\(^2\) It however shares an emphasis with the mainstream in acknowledging that "a direct foreign investment ... transfers a package of not only money capital but also technology and managerial skills..." (1978, *ibid.*, P.42.).

The starting point of the Japanese approach is the Ricardian concept of comparative advantage. With a simple example of trade between England and Portugal involving cloth and wine, Ricardo showed that trade is possible and beneficial to both parties, even when one country is superior to the other in producing both of the products in absolute terms. This is because there is a comparative advantage for each of the country in specialization, one country can produce one of the products more efficiently than the other country in terms of the amount of foregone output of the other product. By specializing in producing the product that each of the countries can produce most efficiently, a larger combined

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1. T. M. Rybczynski, "Factor Endowment and Relative Commodity Prices", *Economica* (Nov. 1955.)
output is achieved. By trading with each other, these two countries share this increased output, and therefore both gain.

Ricardo did not explain the source of this comparative advantage in his work. To seek an explanation, Heckscher and Ohlin proposed the factor-endowment theorem (H-O theorem). The theorem predicts that a country will have a comparative advantage and therefore will export those products in which its most abundant factor is used relatively intensively; conversely, it will import the commodities which incorporate factors with which the country is poorly endowed.

In both the original Ricardian model and standard H-O theory, however, DFI is not allowed, since it is assumed that while other factors of production are completely mobile, capital and labour are completely immobile internationally.

But it needs only one step further from the H-O theorem for R. Mundell\(^1\) to suggest that trade and FI might be complete substitutes for each other. He shows that an increase in trade impediments stimulates factor movements and that an increase in restrictions to factor movements stimulates trade.

In the meantime, the Rybczynski theorem implies that, as a result of factor growth associated with, for example, FI, comparative advantages between countries change. More specifically, with the flow of FI, a developing country whose initial comparative advantage lies in labour-intensive production (and that is to the advantage of world trade), now witnesses a faster growth in non labour-intensive production, leading to a change in advantage.

What the Japanese approach argues is that this change in comparative advantage pattern is not desirable, because of the high cost involved. There are three possible outcomes as a result of capital inflow to capital-intensive sector in the host country:

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1), First, although there is some development in production, the host country is still not able to produce the capital-intensive products more cheaply than the capital exporting country, due to difficulties in absorbing sophisticated technology. Then the host country loses;
2), If the developing country is able to reduce the price of the goods by a small margin, then the volume of world trade is reduced, and both countries lose;
3), If the host country is indeed able to establish a new comparative advantage, and starts to export the goods, then the exporting country stands to lose.

In contrast, if the inflow of DFI happens in a labour-intensive sector, the host country will find it easier to absorb the transferred technology and strengthen further its existing comparative advantages. Trade volume will be increased, and thus world welfare. It advocates that DFI should also flow into sectors where the host country has a potentially comparative advantage.

What are the implications of this argument for the host country? While the argument that DFI can be more efficiently used to improve productivity in labour-intensive sectors than in others, is intuitively appealing, it should be born in mind that, first, the real world is not a two products and two countries game; what is true in a two-country model is not necessarily true in the multiple-country world; and second, by strengthening one's existing comparative advantages and producing more, there is a danger of "immiserizing growth" for the host country. Furthermore, if the pattern of comparative advantages between countries is to continue, it will inevitably lead to the permanence of the existing world economic order, and less developed countries would have little chance to improve their position relative to more developed countries.

It is therefore important for a host country such as China to strike a balance between encouraging DFI in labour-intensive sector for their immediate income generation effect, and encouraging DFI in technology-intensive sector for long-term development.
2.2.4. Socio-political Impact

Most controversial of all is the impact that DFI might have upon the socio-political conditions in the host developing countries. Much of the related discussions are closely associated with the Marxist tradition. The conclusions are however far from uniform.

Most of current Marxist writings on the issue are (or claim to be) built on, the theoretical basis laid down by Lenin in his famous work, *Imperialism, the Highest Stage of Capitalism*. While acknowledging that "the export of capital influences and greatly accelerates the development of capitalism in those countries to which it is exported"\(^1\), Lenin stressed the negative aspects of the impact that foreign capital has on the recipient less developed countries. He pointed out that the export of capital gives rise to a number of forms of state dependence by the recipient countries on the exporting countries (*ibid*, p.81). He emphasized the parasitic, decaying nature of imperialism which was characterized by monopoly, beside the export of capital, so as to hamper technical progress generally. Foreign capital could therefore no longer play a progressive role in the recipient less developed countries.

Lenin also pin-pointed the impact of foreign capital on the social structure of the host countries. The existence of foreign capital and the resultant influences entailed the emergence of a group of native people who were in collaboration with the foreign power in exploiting the local population (*ibid*, P. 95).

On the basis of Lenin’s proposition, the contemporary Marxist writers, particularly those connected with the dependency school, continue to emphasize the monopolistic nature of the investing companies, mainly TNCs. FI in the less developed countries is seen as contributing to the 'blocking of development' or the 'development of underdevelopment' through three principal mechanisms linking FI to underdevelopment. They are: 'drain of surplus' from the less developed to more developed, the creation of monopolistic structure and the emergence of a dependent bourgeoisie that is incapable of playing its historical role in promoting

capitalist development in the less developed countries (Jenkins, 1987, op. cit., pp. 28-30).

On the other side, some Marxist writers have developed a view that stresses that the impact of FI on the less developed countries is mainly positive, in the sense that FI promotes the development of local productivity, although the development is capitalist in nature. This point of view can be traced back to Marx's writings on India that the impact of imperialism in destroying pre-capitalist structures and laying down the basis for the development of capitalism was progressive.

In this argument, Warren is pre-eminent. He regards imperialism as playing a pioneering role in the development of capitalism in the less developed countries. Warren refutes almost every argument that Lenin brings out in his thesis. In particular, however, Warren disagrees with Lenin's definition of imperialism as "monopoly capitalism", and Lenin's thesis that imperialism as such has lost its innovative forces. Instead he declares:

"The rise of oligopolistic market structures ... has not reduced competition but on the contrary has intensified it." (ibid., p. 79)

A. Emmanuel (1976, op. cit.) also rejects many of the critical points put forward by dependency theorists. He highlights the declining magnitude of FI to the less developed countries due to the rapid expansion of domestic markets in the central countries. He then suggests that the deadlock at the "periphery" occurred not because international capital flowed in but because, it has stayed out.( p. 760). His refutation of the 'appropriate' technology argument is forceful:

"It appears to me that the 'appropriate' technology is the very thing to be outlawed. An appropriate technology for poor countries can only be a poor technology; and appropriate

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1. Karl Marx, "The British role in India", and "The future result of British role in India", in S. Avineri (ed), Karl Marx on Colonialism and Modernization. New York, Boubleday, pp. 93-93; and pp. 132-137.
technology made to measure for the underdeveloped can only be an anti-development technology."

A more relevant question, in the context of this thesis, is of course concerned with the possible impact that FI might have on a so-called socialist country, which is characterized by dominant public ownership and the state's attempt to control the economy.

The experience in the Eastern Europe bloc represented a liberal tendency towards capital from western countries in the face of economic difficulties. For example, critical as Lenin was about the export of capital in general, he was clearly positive about the benefits that foreign capital would bring in a undeveloped "socialist" economy such as Russia in the early twenties (ie. the New Economic Policy period from 1921 to 1926). For Lenin, at that point, foreign capital was desired in order to build the material basis, ie., large-scale industry, for fully-fledged socialism. He reckoned:

"Capitalism is a bane compared with socialism. Capitalism is a boon compared with medievalism, small production, and the evils of bureaucracy which spring from the dispersal of the small producers. Inasmuch as we are as yet unable to pass directly from small production to socialism, some capitalism is inevitable as the elemental product of small production and exchange, so that we must utilise capitalism (particularly by directing it into the channels of state capitalism) as the intermediary link between small production and socialism, as a means, a path, and a method of increasing the production forces."1

At the time, Lenin was saying that some capitalism was not at all dangerous for socialism as long as transport and large industry remain in the hand of the proletariat2. From the point of view of control, Lenin advocated that there was a limit to the extent to which foreign capital could be encouraged safely in so-called socialist countries.

2. Ibid. p. 626.
Since the 1960s, the various socialist governments in the East have adopted the policy of permitting FI, which is often concurrent with reform policy. The relationship between the two was nevertheless not clear. Tickin (cited in A. G. Frank\(^1\) ) suggests that economic reforms and the introduction of foreign technology, through FI or foreign trade, have a mutually reinforcing spiral effect, in which the failure of the reforms to live up to expectations will lead to still closer ties with the West and to still greater concessions. The importation of technology whets the appetite for more of the same, and increases the attractiveness of the reforms:

"Thus, the beneficiaries of this process of East-West integration in the socialist countries, along with their ruling class, will become increasingly dependent on the West - and on economic and political stability in the West - to maintain their power in the East. Meanwhile, no less than in the underdeveloped capitalist countries, Eastern Europe and the Soviet Union will be importing not only Western factories, technology and products, but the capitalist relation embodied in them, including speed of production, capitalist organisation and criteria of decision making, capitalist wage structure and income differentials, capitalist consumption pattern and ideology, and capitalist class structures. In short, the socialist countries of Eastern Europe will be and are already importing capitalism." (ibid., p. 227)

This view points to a possibility that the inflow of foreign capital and technology might become a substitute for the serious efforts in socialist countries to reform their economy. It however overlooks the fact that the very aim of economic reforms in these countries, including China, included the introduction of some aspects of capitalism. The real issue is not whether they are introducing capitalism but at what cost and with what benefit.

2.3. Evaluation Methodology

The basic aim of this study is to evaluate the effectiveness of the Chinese government's policy of encouraging DFI in manufacturing, or more specifically, to what extent the policy has succeeded in achieving its

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objectives without involving unacceptable costs. The reasons for focusing on manufacturing are as follows: first, the Chinese policy has placed a special emphasis on attracting manufacturing DFI; second, manufacturing represents the part of the Chinese economy where China's comparative advantage as a low-cost production location is most significant; and third, manufacturing is where various DFI policy objectives, such as transfer of technology, are most relevant.

Policy evaluation is closely related to ordinary impact assessment of DFI on host countries, but differ from that. This is because the assessment of host country impact permits a much freer and wider choice of subjects to be considered, while a policy evaluation focuses on impact that are related with policy objectives. In other words, policy evaluation includes a close comparison of the expected and the achieved. On the other hand, policy evaluation is explicitly concerned with the effectiveness of the policy. That is to say, the achievement has to be gauged in relation to cost.

Nonetheless, the methodology developed in impact assessment can provide a useful starting point for policy evaluation. In the former, two points of consideration are crucial. First, the demarcation of the area where the impact is to be examined; and second, the most likely alternative. The impact has to be assessed by comparing with what would have happened without the effect of the policy. In policy evaluation, however, we are also concerned with the issue of cost which is involved in bringing about the changes in the targeted area.

Thus to evaluate the effectiveness of the policy, first, the target population, on which the policy is targeted, must be defined clearly, since the outcome of the implementation of the policy has to be measured in terms of the magnitudes of the intended changes happening to the target. Second, the outcome of the intervention must be assessed against the most likely alternative, i.e., what would have happened to the target without the policy. Third, the various costs in relation to effects have to be determined.

To conduct such an evaluation, cost-benefit analysis seems to provide a very useful tool at the level of individual project. One such procedure is
provided by the OECD's Manual.\textsuperscript{1} There are however a number of aspects in which the appraisal of a DFI project is significantly different from ordinary project appraisal. Separate guide-lines therefore have been worked out by Deepak Lal \textit{et al.}\textsuperscript{2} The essence of such an approach is that a project whose net social present value is positive (or the highest compared to others) is regarded as worthy undertaking and vice versa. Although the method is essentially a micro-approach, it is theoretically possible to evaluate a group of individual projects together.

The conduct of such an evaluation involves the resolution of a series of problems, the first of which is to identify the costs and benefits related with the project(s). The next step then involves the valuation of these items and the discounting procedure in order to derive the monetary amount of net present social value.\textsuperscript{3}

Given that there is serious price distortion in China which makes estimating shadow prices necessary, and that most DFI projects in China are small and do not follow standard accounting practice and the number of such project is as large as over 28,000, this kind of appraisal exercise is bound to be unprofitable for a study such as the present one. What is required is a macro-approach, which can provide reasonably sound conclusions about the effectiveness of this policy.

In this respect, there are a number of approaches available, which have been individually tried but have not been as standardized as the one described in Deepak Lal \textit{et al}. One such approach utilises an input-output model and its multipliers to estimate DFI's impact on the host country's output, income and employment. An example is provided by the study of

\begin{footnotesize}
\begin{enumerate}
  \item Deepak Lal \textit{et al.}, "Guide-lines for Appraising Foreign Investment in Developing Countries", in Deepak Lal \textit{et al.}, \textit{Appraising Foreign Investment in Developing Countries}, London, Heinemann Educational Books Ltd., 1975, pp. 37-93.
\end{enumerate}
\end{footnotesize}
the economic impact of the *Maquiladora* industry in Mexico by Ramon G. Guajardo-Quiroga and Lonnie L. Jones. 1

Another macro-economic approach is to employ econometric modelling to determine DFI's impact on the host country in similar matters. Such an example is given by a study on the impact of DFI of the Scottish Economy by John Foster and James Malley. 2

There are severe obstacles to conducting such macro-economic assessment in the case of China, too. Even the most general or rudimentary input-output table has not been available. Moreover, most of Chinese prices are severely distorted. And finally, information on FIEs' production and the distribution is almost completely absent.

But most crucially, this kind of impact assessment can not serve our purpose. Because, first, due to the vast scale of the Chinese economy, the impact of DFI on the economy in terms of its percentage in total national output, employment and income is likely too small to render reliable results.

Second, as a policy evaluation, it is not so much interested in the impact in the usual fields such as output, income and employment, but in examining to what extent the policy objectives have been achieved and at what cost.

So the central questions are: first, what are the policy objectives? second, to what extent the policy objectives have been achieved and at what cost?

2.4. Conclusion

This chapter reviews mainly theories on DFI's host country impact. It shows that DFI and the operation of related companies have both positive and negative affects on host developing countries. The positive affects

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include: first, a larger output related with a larger capital stock, if the inflow of DFI does not have an adverse impact on the stock of domestic capital; second, taxation and an increase in government revenue; third, higher returns to factors of production other than capital; fourth, the expansion of capital intensive- and technology-intensive industries; fifth, growth of exports, if the investment is export-oriented; finally and most importantly, the transfer of technology from foreign investing firms to domestic firms.

On the other hand, there are also a number of possible negative affects: first, the efforts to induce DFI entails costs in developing infrastructure; second, the outflow of dividends and profits later may cause problems in the balance of payments; third, when the DFI adversely affects domestic capital stock, it leads to an absolute decline in real income of the host country; fourth, taxation revenue may be eroded by accounting practices adopted by investing firms; fifth, DFI may cause market fragmentation and duplication of small-scale production capacities; sixth, over concentration of exports in certain products might result in deterioration in the terms of trade; and finally, in socialist countries where the policy of encouraging DFI and economic reform are being introduced simultaneously, the operation of FIEs might undermine the state’s control over the economy; on the other hand, the vested-interest group who benefit from collaborating with foreign investors might discourage serious efforts on the part of the government to reform the economy.

It argues that, in order to evaluate the effectiveness of the present policy, it is necessary to ask two questions: first what are the policy objectives; and second, to what extent these objectives have been achieved, and at what cost.

In order to appreciate the significance of the Chinese policy and its external conditions, however, it is useful to review the broader international economic situation. This is the task of the following chapter.
CHAPTER 3. THE GLOBAL ECONOMIC ENVIRONMENT IN THE 1980S

Changes in the global economic environment not only provided the impetus for the changes in China's development strategy but also offered opportunities for the realization of such a strategy. This is because, inspired by the rapid economic growth in Japan and the four small Asian newly-industrialized countries (NICs), the Chinese DFI policy lays a special emphasis on export-oriented manufacturing investment.

The world economy in the 1980s however provided mixed favourable and unfavourable conditions for the Chinese strategy. As pointed out by a United Nation publication, "the world economic environment of the 1980s has been characterized by a further slow-down in economic growth, greater international economic instability and growing protectionism."1 Although the world economy achieved considerable recovery from 1984 (see table 3.1.), it fell back again in the final year of the decade. Nonetheless, since the recovery of the mid-1980s, as most of time since 1950s, world trade has grown faster than world output. Apparently, exchange between countries in the world has been further extended.

Table 3.1. World economic profile in the 1980s2
(Annual percentage change)

<table>
<thead>
<tr>
<th>Year</th>
<th>Output</th>
<th>Trade</th>
<th>Year</th>
<th>Output</th>
<th>Trade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>2.2</td>
<td>1.3</td>
<td>1985</td>
<td>3.4</td>
<td>2.8</td>
</tr>
<tr>
<td>1981</td>
<td>1.7</td>
<td>1.1</td>
<td>1986</td>
<td>3.2</td>
<td>4.5</td>
</tr>
<tr>
<td>1982</td>
<td>0.5</td>
<td>-2.0</td>
<td>1987</td>
<td>3.2</td>
<td>5.8</td>
</tr>
<tr>
<td>1983</td>
<td>2.7</td>
<td>3.0</td>
<td>1988</td>
<td>3.8</td>
<td>7.5</td>
</tr>
<tr>
<td>1984</td>
<td>4.5</td>
<td>8.7</td>
<td>1989</td>
<td>3.1</td>
<td>5.6</td>
</tr>
</tbody>
</table>

3.1. DFI in Less Developed Countries (LDCs)

DFI in the 1980s had a slow start in the first five years, but started to grow rapidly from 1986 (see table 3.2.). As far as the LDCs are concerned, however, DFI inflows experienced both relative, and to a lesser extent, absolute declines after 1982. As table 3.2 indicates, the share of the LDCs in the world's total DFI decreased from 49 per cent in 1982 to 9 per cent in 1988, although it recovered a little in 1989. Whereas the magnitude of the investment declined from US$24.0 billions in 1982 to US$ 12.1 billions in 1986 before it recovered again, reaching US$18.5 billion in 1989.

This decline can be attributed to a number of factors, particularly the poorer performance of the LDC economies, compared with that of the developed countries, which is manifested in the lower rate of return on DFI in LDCs. During the period 1981 to 1986, the output of the developed countries grew by 2.2 per cent annually, while the rate for developing countries (excluding China and centrally planned economies of Europe) was only 1.5 per cent. Some developing countries, particularly those in Africa and Middle East, even experienced a negative rate of growth.

Another cause for the decline of DFI in the LDCs is the changed composition of DFI. In recent years, DFI in services has become increasingly important. By the mid-1980s, about 40 per cent of the world's total DFI stock of about US$ 700 billion (about US$ 300 billion) was in service, compared to approximately one quarter at the beginning of the 1970s and less than 20 per cent in the early 1950s. DFI in services has increasingly become the most dynamic part of the growth of DFI in general. During the first half of the 1980s, more than half of total investment flows of about US$ 50 billion annually were in the service

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1. LDCs here encompass what is referred to as "developing countries" in IMF and UNCTC publications, and "developing economies" in World Bank publications. For differences in the coverage of these terms, see World Bank, *World Development Report (WDR):1989*, pp. 250-1.
2. UNCTC, *op. cit.*, p. 82.
The intrinsic nature of service activities however dictates that the bulk of this growing DFI goes to the developed countries, where for foreign investment demand for services is greater than in LDCs.

### Table 3.2. Direct foreign investment inflow in the reporting economies

<table>
<thead>
<tr>
<th>Year</th>
<th>World</th>
<th>LDCs</th>
<th>Share of LDCs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>34.9</td>
<td>5.1</td>
<td>0.15</td>
</tr>
<tr>
<td>1980</td>
<td>46.8</td>
<td>11.6</td>
<td>0.25</td>
</tr>
<tr>
<td>1981</td>
<td>57.5</td>
<td>20.7</td>
<td>0.36</td>
</tr>
<tr>
<td>1982</td>
<td>49.0</td>
<td>24.0</td>
<td>0.49</td>
</tr>
<tr>
<td>1983</td>
<td>47.4</td>
<td>16.4</td>
<td>0.35</td>
</tr>
<tr>
<td>1984</td>
<td>51.8</td>
<td>15.0</td>
<td>0.29</td>
</tr>
<tr>
<td>1985</td>
<td>48.0</td>
<td>12.2</td>
<td>0.25</td>
</tr>
<tr>
<td>1986</td>
<td>76.0</td>
<td>12.1</td>
<td>0.16</td>
</tr>
<tr>
<td>1987</td>
<td>109.7</td>
<td>14.4</td>
<td>0.13</td>
</tr>
<tr>
<td>1988</td>
<td>158.0</td>
<td>14.9</td>
<td>0.09</td>
</tr>
<tr>
<td>1989</td>
<td>181.8</td>
<td>18.5</td>
<td>0.10</td>
</tr>
</tbody>
</table>

Nonetheless, the decline of DFI in LDCs does not preclude growth of DFI in some LDCs. On the contrary, the re-allocation and re-distribution concomitant with the general decline of DFI in LDCs tends to result in a relative concentration and rapid increase of DFI in a small number of LDCs.

### 3.2. Geographical Concentration of DFI and Shifting Comparative Advantages

During the 1980s, the area which gained most in the share of DFI inflow among LDCs is Southeast and East Asia. Its share in the world's total DFI

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2. IMF, *Balance of Payment Statistics*, Yearbook, 1985 and 1990 issues, Part Two, table 3-B. The data for 1983 and 1984 are the average of the figures from the two issues, because there is discrepancy between the data. Conversion from SDR amount to US dollar amount is made by employing the conversion rate between SDR and US dollars over the years. For original data, see Appendix 1.
annual flow increased from 6.2 per cent during 1975 to 1980 to 9.9 per cent in 1981 to 1985. In terms of absolute amount, the average annual inflow of DFI increased from US$2007.2 million to US$ 4816.7 million during the same period. In particular, the annual inflow of DFI in Malaysia, Hong Kong, Singapore almost doubled. But most outstanding of all was the dramatic growth of DFI in China. Starting from zero in the later 1970s, China's share of DFI in LDCs steadily increased to 21 per cent by 1988 (but fell to 18 per cent in 1989), whereas its share of DFI in Asian LDCs reached 53 per cent in 1989.

Table 3.3. Annual inflow of DFI in Asian LDCs

<table>
<thead>
<tr>
<th>Year</th>
<th>DFI (US$ billions)</th>
<th>Asia's share in all LDCs (%)</th>
<th>China's share in Asian LDCs (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>4.8</td>
<td>na</td>
<td>23</td>
</tr>
<tr>
<td>1982</td>
<td>4.6</td>
<td>0.43</td>
<td>19</td>
</tr>
<tr>
<td>1983</td>
<td>4.8</td>
<td>0.64</td>
<td>29</td>
</tr>
<tr>
<td>1984</td>
<td>4.2</td>
<td>1.26</td>
<td>28</td>
</tr>
<tr>
<td>1985</td>
<td>3.9</td>
<td>1.66</td>
<td>32</td>
</tr>
<tr>
<td>1986</td>
<td>4.9</td>
<td>1.88</td>
<td>40</td>
</tr>
<tr>
<td>1987</td>
<td>6.7</td>
<td>2.31</td>
<td>47</td>
</tr>
<tr>
<td>1988</td>
<td>6.9</td>
<td>3.19</td>
<td>46</td>
</tr>
<tr>
<td>1989</td>
<td>6.4</td>
<td>3.39</td>
<td>35</td>
</tr>
</tbody>
</table>

Much of this concentration can be explained by the good performance of the economies in the region, and therefore the expansion of the local market. From 1980 to 1988, real GDP increased by 7.4 per cent annually in Asian LDCs, and in particular, the four newly-industrialized economies ( Hong Kong, Singapore, Republic of Korea and Taiwan province ) had a

---

1. Ibid., p. 76, table V. 1.
3. Same as table 3.2.
real GDP growth of 7.9 per cent annually. China's growth rate was as high as 10.4 per cent, during the same period. ¹

There are also other location-specific factors which favourably influenced the inflow of DFI in Southeast Asia. They include: geographical proximity to Japan; the rise of the region's NICs as intra-regional investors; comparative advantage as an off-shore lower-cost production base; favourable policy regimes and reasonably good infrastructure facilities.

Japanese DFI has played a major role in the Southeast and East Asian LDCs, and the emergence of Japan as a major international investor has greatly facilitated the growth of DFI in the region, although an increasing proportion of Japanese DFI has been made in regions other than Asia. During the years from 1981 to 1985, nine South and East Asian countries, including the four NICs (Hong Kong, Singapore, Republic of Korea, Taiwan province) plus ASEAN (excluding Singapore and Brunei Barussalam) and China, received an average annual inflow of DFI of US$ 4444 million, 92.3 per cent of Asia's total, of which US$ 1896 million (42.7 per cent) came from Japan.²

Moreover, the share of Japanese investment in Asia's total inward DFI seems to be increasing in more recent years. In the fiscal year of 1987, the total DFI that nine Asian LDCs received was US $ 5.93 billion,³ of which Japan alone invested US $ 3.61 billion.⁴ In 1989, Japan's committed DFI in Asia was as high as US$ 8.2 billion.

Japanese DFI has experienced three phases of expansion since the liberalization of DFI by the Japanese government in the later 1960s, with different characteristics and different implications for the Asian LDCs. The years before the middle of the 1970s were characterized by a Japanese search for resource-oriented products, which is partly related with Japan's own need and partly with the primary goods price boom then. The share

¹ Robert Lynn & Fo. Desmond McCarthy, "Recent Economic Performance of Developing Countries", PPR working paper series (WPS 228), World Bank, p.27, Statistical Appendix, table 1.
² Economic and Social Commission For Asia and the Pacific of the United Nations, op cit., pp.81-84.
³ see table 3.3.
of manufacturing DFI was insignificant. In 1975, its share in Japan's cumulative DFI was only 16.2 per cent.¹ Geographically, Japanese DFI in this phase was rather dispersed, with Latin America and West Asia being the two main destinations. But as far as manufacturing DFI is concerned, Southeast Asia was the largest recipient, receiving 37.9 per cent of the total Japanese manufacturing DFI by 1975.²

In the second phase, that is, from the middle of the 1970s to the end of the 1970s, Japanese outward DFI was motivated by Japanese firms' need to re-allocate their 'sunset' labour-intensive and resource-processing industries, in the face of rising wage level; the process was encouraged by the Japanese government's call for structural adjustment. The share of manufacturing DFI increased considerably.³ Whereas Asia's share in Japan's DFI increased from about one quarter in the early 1970s to one third in the later 1970s.⁴

The third phase in the 1980s is however largely in favour of developed countries, particularly the U. S. A., in an attempt by the Japanese companies to overcome market access difficulties and improving services to foreign customers. In the meantime, Asia's share of Japanese DFI has dropped from 19 per cent in 1982 to 12 per cent in 1987.⁵ But the sheer speed of Japanese DFI's growth and its growing scale guarantees that Japanese DFI still plays a leading role in the Southeast and East Asia in this period.

Second, the growing intra-regional DFI flow among the developing countries in the region also contributes to the growth of DFI. The available information indicates that the cumulative stock was equivalent to 12 per cent of the outstanding stock of DFI within the developing ESCAP region in 1982. The flow has increased substantially in the past few years. In 1987, 45 per cent of DFI flow in Malaysia, 20 per cent in the

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¹. Sueo Sekiguch, Japanese Direct Foreign Investment, Allanheld, Montclair, Osmun & Co., Publishers, 1979, p. 24, Table 2.2.
². Ibid., p. 54.
⁴. Economic and Social Commission For Asia and the Pacific of the United Nations, op. cit., p. 84.
⁵. Ibid., p. 84.
Philippines, 25 per cent in Thailand and 17 per cent in Indonesia had come from other Asian LDCs. This sort of DFI has been particularly significant in the case of China. During the period of 1979 to 1987, Hong Kong, and to some extent Macau, contributed 57 per cent of total DFI inflow in China.

This intra-regional DFI flow is the consequence of the rise of the so-called "new multinationals" (MNCs), i.e., multinationals from LDCs, in the region, which in turn is the result of economic growth. J. Dunning's developmental approach suggests that, as a country's economy develops, its position in relation to international investment undergoes a transformation, from principally a recipient of DFI to a net investor of DFI. Since the four NICs in the region have achieved considerable economic development, they have become net outward foreign investors.

Characteristically, new MNCs' investment is concentrated in neighbouring countries. For instance, of the 494 foreign manufacturing subsidiaries of parent firms in Southeast Asia, which were covered by Wells' study, 428 were in the same region.

Third, the Asian LDCs possess comparative advantages as off-shore low-cost manufacturing off-shore base for the more developed countries inside or outside of the region. In this respect, one frequently cited factor is the relatively lower labour cost in these countries. This has been demonstrated by a recent World Bank report. (see Table 3.4.)

Although the three East Asian economies included in the table are the ones where labour cost has risen rapidly and, in comparison to other economies in the region, are no longer low-cost production site, their cost is still comparatively lower than North America and Europe. On the other hand, the three countries included in the group of South Asia represents the lowest cost in the world. Significantly, China's wage rate is even lower than these South Asian countries.

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1. Ibid., pp. 84-85.
3. S. Lall, op cit., p. 4.
Table 3.4. Average Total Hourly Cost of Labour in Manufacturing by regions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin America/a</td>
<td>0.62</td>
<td>1.00</td>
<td>1.57</td>
<td>1.26</td>
</tr>
<tr>
<td>Africa/b</td>
<td>0.50</td>
<td>0.85</td>
<td>1.21</td>
<td>1.06</td>
</tr>
<tr>
<td>South Asia/c</td>
<td>0.25</td>
<td>0.32</td>
<td>0.45</td>
<td>0.48</td>
</tr>
<tr>
<td>East Asia/d</td>
<td>0.30</td>
<td>0.65</td>
<td>1.36</td>
<td>1.73</td>
</tr>
<tr>
<td>Europe I/e</td>
<td>0.63</td>
<td>1.64</td>
<td>2.90</td>
<td>2.58</td>
</tr>
<tr>
<td>Europe II/f</td>
<td>NA</td>
<td>4.72</td>
<td>9.29</td>
<td>7.50</td>
</tr>
<tr>
<td>North America/g</td>
<td>NA</td>
<td>6.10</td>
<td>9.16</td>
<td>11.89</td>
</tr>
<tr>
<td>Japan</td>
<td>NA</td>
<td>3.05</td>
<td>5.61</td>
<td>6.47</td>
</tr>
</tbody>
</table>

/a includes: Argentina, Brazil, Colombia, Chile, Mexico, Peru;
/b includes: Kenya, Morocco, Malawi, Nigeria, Tanzania, Zambia;
/c includes: India, Pakistan, Sri Lanka;
/d includes: Hong Kong, Republic of Korea, Singapore;
/e includes: Greece, Portugal;
/f includes: Austria, France, Germany, Spain, Sweden, United Kingdom;
/g includes: Canada, U. S. A.

But as the report correctly points out, the cost-saving advantage of the LDCs in the region becomes less striking, when measured in terms of labour cost per unit of production (LCPUP). Table 3.5. shows that the difference in LCPUP among different regions is much smaller than of hourly labour cost. It is interesting to note that, according to table 3.5, the three East Asian countries is actually comparatively advantageous in LCPUP than the three South Asian countries, although the hourly labour cost of the later is lower than the former.

However, labour costs are perhaps not the most important factor in the inflow of DFI. Numerous studies on the impact of labour cost on the inflow of DFI have so far failed to prove its significance. One such study

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is by Schneider and Frey.\(^1\) Their study employs four different models, from pure political or economic ones to comprehensive ones, to analyse data of 51 LDCs for the year of 1979. One of the included variables is wage level. But in all four models, no significant impact of wage levels on the inflow of DFI among these countries was detected.

Table 3.5. Labour cost per unit of production\(^2\)  
(labour share)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin America/a</td>
<td>0.28</td>
<td>0.25</td>
<td>0.24</td>
<td>0.22</td>
</tr>
<tr>
<td>Africa/b</td>
<td>0.38</td>
<td>0.39</td>
<td>0.36</td>
<td>0.36</td>
</tr>
<tr>
<td>South Asia/c</td>
<td>0.41</td>
<td>0.42</td>
<td>0.43</td>
<td>0.33</td>
</tr>
<tr>
<td>East Asia/d</td>
<td>0.29</td>
<td>0.22</td>
<td>0.19</td>
<td>0.23</td>
</tr>
<tr>
<td>Europe I/e</td>
<td>0.36</td>
<td>0.54</td>
<td>0.50</td>
<td>0.52</td>
</tr>
<tr>
<td>DCs/h</td>
<td>0.59</td>
<td>0.61</td>
<td>0.60</td>
<td>0.55</td>
</tr>
</tbody>
</table>

For a, b, c, d, e, see note for table 3.4.  
/h include the countries of e, f, g in table 3.4.

Similarly, a recent study by J. P. Agarwal also fails to prove that changes in relative earnings per employee in the host countries (including Republic of Korea, Hong Kong, Indonesia, Malaysia, the Philippines, Singapore, Taiwan and Thailand) compared with home countries (including U. S. A., United Kingdom, Japan, Federal Republic of Germany) have a statistically significant impact on the inflow of DFI in these Asian countries during 1978 to 1986.\(^3\)

What is commonly discovered by these two studies is that the inflow of DFI is most importantly influenced by per capita income level of, and to a less extent by bilateral aid or multilateral aid to, the host LDCs. Given that per

---


\(^2\) Luis T. Riveros, *op. cit.*, p.34, table 8.

capita income level is a result of economic growth, the matter of importance is really how the LDCs in Southeast and East Asia have achieved a high growth rate. It is noteworthy that, based on a cross-sectional regression analysis, a recent World Bank working paper singles out two especially influential factors for the high growth of Asian economies, that is, a high investment ratio to GDP and to a less extent, export effort.  

It is apparent that the relationship between the high growth of the economies and the increased inflow of DFI is reinforcing to each other: on the one hand, the inflow of DFI enhances a higher investment ratio, and on the other hand a higher investment ratio induces greater economic growth and therefore attracts the inflow of further DFI.

It should be pointed out, however, that it is exactly in these two areas that the policies designed and adopted by some LDCs in the region have attempted to advance. These policies encourage the openness of the economies, particularly the expansion of export. The successful story of the four "small tigers" has been amply documented. Now the second generation of the Asian NICs, including China, Indonesia, Malaysia, the Philippines and Thailand are following the former's footsteps in developing export-oriented economies. What is contained in the following chapters might be helpful in shedding some light on how the inflow of DFI and the policy regimes have interacted in the context of an Asian country such as socialist China to influence its economic growth.

3.3. Growth of Manufacturing Export of LDCs and the Role of DFI

In the last three decades, one of the most significant changes in the world economy is the rising share of LDCs in world manufactured exports, which rose from 8.5 per cent in 1965 to 18.8 per cent in 1988. In terms of

---

LDCs share of OECD countries’ manufacturing imports, it rose from 5.1 per cent in 1968 to 15.2 per cent in 1988.1

The growth is not even over the years, or by country. Table 3.6 lists the top 20 manufacturing exporters from LDCs in 1988 and the growth of their manufactured exports. These 20 countries together accounted for 96.7 per cent of the total manufacturing exports of developing countries in 1988.

It is evident that the growth of LDCs’ manufactured exports is to a great extent influenced by world economic climate. For instance, during the first half of the 1980s, when the world economy was in slow progress, LDCs’ manufactured exports registered a low growth. But the years between 1985 and 1988 saw very significant growth - the rate reached 16.9% per year - following the recovery of world economy.

On the other hand, the differential in growth rates between different countries is remarkable. Fortunately, however, it seems that, after the domination of a small number of countries in the growth of LDCs’ manufactured exports prior to 1980s, more and more developing countries are joining in the ranks of manufactured exporters.

From 1965 to 1980, only three countries registered an annual growth rate of more than 32.3 per cent, that is, 50 per cent over the average growth rate. They included: South Korea, Turkey, Thailand. China’s growth rate was only 14.9 per cent, 31 per cent lower than LDCs’ average.

During 1980 to 1985, however, as many as 11 countries fell into this category (with annual growth rate of 5.55 per cent), including Turkey, Indonesia, Mexico, South Korea, Malaysia, China, Hong Kong, Thailand, India, Portugal, and Taiwan.

1. Ibid, 1990 issue, pp. 210-1, table 17. includes nonreporting nonmembers.
Table 3.6, 20 top LDCs manufacturing exporters and their growth
(millions of dollars in current prices)

<table>
<thead>
<tr>
<th>Country/territory</th>
<th>Manufactured export, 1988 US$m</th>
<th>logarthmic annual growth rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1988</td>
<td>1965-80</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>57477</td>
<td>21.4</td>
</tr>
<tr>
<td>Korea, Republic of</td>
<td>56447</td>
<td>39.7</td>
</tr>
<tr>
<td>Taiwan*</td>
<td>55551</td>
<td>na</td>
</tr>
<tr>
<td>China</td>
<td>34704</td>
<td>14.9</td>
</tr>
<tr>
<td>Singapore</td>
<td>29404</td>
<td>25.7</td>
</tr>
<tr>
<td>Brazil</td>
<td>16171</td>
<td>31.1</td>
</tr>
<tr>
<td>South Africa</td>
<td>15771</td>
<td>17.8</td>
</tr>
<tr>
<td>Mexico</td>
<td>11362</td>
<td>22.3</td>
</tr>
<tr>
<td>India**</td>
<td>10625</td>
<td>11.3</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>10095</td>
<td>17.1</td>
</tr>
<tr>
<td>Malaysia</td>
<td>9382</td>
<td>26.2</td>
</tr>
<tr>
<td>Poland</td>
<td>8851</td>
<td>n.a</td>
</tr>
<tr>
<td>Portugal</td>
<td>8277</td>
<td>16.1</td>
</tr>
<tr>
<td>Thailand</td>
<td>8219</td>
<td>31.7</td>
</tr>
<tr>
<td>Israel</td>
<td>8164</td>
<td>20.4</td>
</tr>
<tr>
<td>Turkey</td>
<td>7464</td>
<td>32.9</td>
</tr>
<tr>
<td>Hungary</td>
<td>6847</td>
<td>9.0</td>
</tr>
<tr>
<td>Indonesia</td>
<td>5726</td>
<td>22.0</td>
</tr>
<tr>
<td>Philippines</td>
<td>4386</td>
<td>29.8</td>
</tr>
<tr>
<td>Pakistan</td>
<td>3010</td>
<td>13.6</td>
</tr>
<tr>
<td>Greece</td>
<td>2970</td>
<td>30.7</td>
</tr>
<tr>
<td>Developing economies</td>
<td>380518</td>
<td>21.5</td>
</tr>
</tbody>
</table>

Note:* Data from the Taiwan government on its exports are available but not strictly comparable to the above data. The Taiwan Statistical Data Book divides all exports into three categories, including agricultural products, processed agricultural products and industrial products. According to the Book, the average annual growth rate, computed in

the same way as the above, for various periods are as follows: 35.6 per cent during 1965 to 1980; 9.9 per cent during 1980 to 1985; and 25.7 per cent during 1985 to 1988. **. The three periods are: 1965-79, 79-85, 85-88.

During the period of 1985 to 1988, 7 countries fall into this category (with a growth rate of 25.4 per cent or more), including Thailand, China, Indonesia, Singapore, Taiwan, Malaysia, Hong Kong.

Although China has been among the major manufacturing exporters from LDCs for some time, it was not until the 1980s that China's manufacturing exports experienced the fastest growth in their history. During 1980 to 1985, its growth rate was 10.4 per cent, almost three times as high as the average level of all LDCs. Whereas in the period 1985 to 1988, its manufactured exports grew at 37.4 per cent. China became the second fastest growing manufactured exporter, after Thailand.

Table 3.7. Share of manufactured exports of low- and middle-income economies' total export, 1965, 1988

<table>
<thead>
<tr>
<th>Export goods</th>
<th>1965</th>
<th>1988</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuels, mineral and metals</td>
<td>30</td>
<td>22</td>
</tr>
<tr>
<td>Other primary commodities</td>
<td>53</td>
<td>21</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>18</td>
<td>58</td>
</tr>
<tr>
<td>of which</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machinery and transport</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>equipment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The change appears to be even more dramatic when measured by the share of manufactured goods in LDCs' total export (see table 3.7.). The fact is that the conventional singular pattern of international trade between primary commodities from LDCs and manufactured goods from developed countries no longer exists. Nowadays, the latter exports more primary goods than the former. This is not to say of course that the developed countries and LDCs have reversed their relative position. The reality is that international trade has come to be dominated by manufactured goods.

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1. *Ibid.*, applies to reporting countries only.
The share of manufactured goods in world trade has risen from 59 per cent in 1965 to 76 per cent in 1988. 1

Noticeably from the above table, the composition of manufactured exports from LDCs has changed towards more technology-intensive goods: the share of machinery and transport equipment in their total export has increased from 1 per cent in 1965 to 16 per cent in 1988, a significant improvement indeed.

How has this change happened? There might be a great number of factors. But the existing literature stresses two broader factors: the internationalization of production and the export-oriented development strategies promoted by some developing countries.

After considering factors such as developing countries' effort to develop basic infrastructure and education and to industrialize, decline of transport and communication cost and the alleged liberalization of international trade after the world War II, Nigel Harris turns to the decisive factor, namely, internationalization of production:

"However, all these factors, whether internal or external to less developed countries, were permissive - that is, they would considerably facilitate the expansion of manufactured exports, but would not themselves produce it. If companies and buyers in more developed countries had not been impelled by the changing structure of the world market to seek lower-cost purchases (or lower-cost locations for manufactures) in new countries, the permissive factors could not have supplied the missing demand. Efforts by companies and governments in more developed countries to prevent the transfer of technology or manufacturing to the less developed were overwhelmed by the sheer scale of market demand."2

Indeed, the world demand for manufactured goods from LDCs seems to be great and sustainable. From table 3.8, it can be seen that, throughout the period 1965 to 1986, manufactured exports experienced the highest growth

rate among all categories of exports. The growth was also the most stable, although during 1980 to 86, the growth was not as great as the previous two periods. But the years after 1986 witnessed strong recovery of manufactured export growth rate: 17.6 per cent in 1987 and 10.2 per cent in 1988.

Although the prices of manufactured exports were affected by the general decline of prices in the first half of the 1980s, prices recovered and grew considerably during 1986 to 1988. What is more is that, after the recovery, manufactured exports are the only category of exports whose price has steadily risen. In 1988, the increase in prices of manufactured exports actually bigger than the rise of the prices for manufactured exports from industrial market economies.¹

Table 3.8. Average annual change in export volume from less- and middle-income economies(%)²

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufactures</td>
<td>11.6</td>
<td>12.8</td>
<td>9.5</td>
</tr>
<tr>
<td>Food</td>
<td>2.4</td>
<td>4.2</td>
<td>3.1</td>
</tr>
<tr>
<td>Nonfood</td>
<td>2.1</td>
<td>0.4</td>
<td>2.2</td>
</tr>
<tr>
<td>Metals and minerals</td>
<td>4.8</td>
<td>6.5</td>
<td>1.2</td>
</tr>
<tr>
<td>Fuels</td>
<td>5.6</td>
<td>-0.4</td>
<td>2.0</td>
</tr>
</tbody>
</table>

The growth of manufactured exports from LDCs is partly the result of the expanded productive capacities in these countries. Measured by value added in manufacturing, the share of low- and middle-income economies in the world's total rose from 15.1 per cent in 1970 to 18.5 per cent in 1987.³ It is nonetheless true that the growth of manufactured exports of the LDCs has to a great extent outperformed the growth of their manufacturing production capacities, which is a clear indication of the growing ability of their manufacturing industries to produce tradable goods.

¹. World Bank, WDR, op. cit., 1990, p. 165, table A. 9
². Ibid., p. 164, table A. 8.
³. Ibid., pp. 188-9, table 6. applies to reporting economies only.
Significantly, the scattered available information suggest that DFI plays an important role in this process:

"In fact, whenever TNCs are prominent in domestic manufacturing industry, they are no less to the fore in exports of manufactures. Indeed, their share of exports has quite often been higher than their share of total domestic production"\(^1\)

To illustrate, it is found that the affiliates of TNCs from the United States have played an important role in the growth of technologically more advanced products from developing countries, such as machinery and transport equipment; the United States majority-owned affiliates (MOFAs) in developing countries/territories had a considerable share in the LDCs' total export in electrical goods: they accounted for 4.55 per cent of world trade of the goods in 1983, of which 2.43 per cent (out of 4.55 per cent) was contributed by the MOFAs in the four Asian NICs.\(^2\)

The change is nonetheless not without difficulties for the developing countries. The 1980s saw gathering strength of protectionism in the international trade. This issue will not be taken up here however, since it has been amply documented in various international organizations' publication such as the *World Development Report* (especially the 1987 issue) by the world Bank, and *World Economy Survey* by the United Nations.

3.4. Conclusion

This chapter has argued that the world economy has become increasingly integrated. The principle of comparative advantages is being born out with an unprecedented dynamics: the participation in the international division of labour by the LDCs takes the form of labour-intensive manufactured exports; whereas the more advanced countries, compelled by the need to seek the least-cost production site and to find market in the expanding economies of some LDCs for their products, constantly transfer their financial, technical and managerial resources to LDCs by various forms,

\(^1\) UNCTC, *op. cit.*, p. 158.
particularly through DFI. It seems that the Chinese government's policy to attract DFI, particularly the export-oriented ones, is suitably placed in the international economic climate.

Indeed, it shows that, in the international perspective, the Chinese effort in attracting DFI has been very successful, measured in terms of both absolute value and its share in the total DFI that LDCs received in the 1980s. China was also one of the forerunners in expanding manufactured exports in the 1980s.

The next chapter will look further into various characteristics of DFI in China and the received assessment of the policy.
CHAPTER 4. FOREIGN INVESTMENT IN CHINA SINCE 1978: PRINCIPAL CHARACTERISTICS AND RECEIVED ASSESSMENT

This chapter will, on the one hand, examine the characteristics of foreign investment, mainly DFI, in China, and on the other hand, review the received studies on the topic, including making an assessment of the effectiveness of the policy. The aim is to see whether a reasonably adequate assessment of the policy is already in place, and if not, what are the deficiencies and what can be done to remedy them.

4.1. FI in China since 1978

4.1.1. Forms of Investment

So far, there are three sorts of FI in China, including external loans (ELs), direct foreign investment (DFI), and commercial credits (CCs). DFI in turn has four specific forms: equity joint venture (EJV), contractual (or cooperative) joint venture (CJV), wholly foreign-owned enterprise (WFOE), and cooperative exploitation (CE). This last form covers only mining and oil extraction projects (and therefore does not concern us here). These together are named as foreign investment enterprises (FIEs). In particular, EJV, CJV, and WFOE together are referred as san-zi-qi-ye in Chinese.¹

CJV is unique to China. In essence, it allows greater flexibility in establishing an operation than an EJV. No financial contribution is required on the Chinese side. Local partners can use existing properties, such as sites, premises, or production equipment as investments to establish joint operations with foreign investors. As John Thoburn et al suggest, the minimal requirements for capital provision on the Chinese side could mean that virtually 100 per cent foreign enterprises could be established with local government approval² (before 1988, WFOE required central government approval. ZL-Y.).

¹ San zi literally means three kinds of investment, qi ye enterprises.
Moreover, in CJVs, benefit and risk is shared according to the specifications of the contract rather than relative to the equity share (as in the case of EJVs) so that flexible arrangements of profit distribution can be made by the partners. Usually, the property of a CJV would belong to the Chinese side at the end of the project, because by then the foreign partner’s investment would have been repaid out of the gross profits prior to distribution of net profits between partners.

However, CJVs have certain disadvantages: they seem to lack freedom of action compared to EJVs; the taxation regimes applied to them is also unclear, depending on whether the CJV is regarded as a Chinese legal entity or partnership. The former would as EJVs pay tax at a flat rate (maximum 33 per cent) as EJVs, while the latter would pay tax as WFOE at a progressive rate (maximum 50 per cent). It thus has been suggested that this form is often chosen because it is easier to be approved (ibid, p.65.).

CC mainly consists of two forms: compensation trade (CT) and processing and assembling (P&A), in addition to international leasing. In compensation trade, a foreign partner provides equipment and technology in the form of a loan to be re-paid in instalments by the Chinese side in the form of output. In P&A, however, the Chinese side processes or assembles raw materials or intermediate goods provided by a foreign partner, making finished products as specified, and receives processing fees. Foreign partners usually also provide necessary equipment at an agreed price, which is repaid by the Chinese side through a reduction in processing fees. In the statistics, the value of this equipment is recorded in the category of CC. CT and P&A have played a very important in the development of an outward-oriented economy in southern China. They are often referred as san-lei-yi-bu projects in Chinese writings.2

Since 1979, when the Chinese government adopted its open policy, China has received some US$ 70 billion of FI in various forms (see table 4.1). In particular, by the end of 1990, over 28,000 DFI projects had been

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1. Ibid., p. 65.
2. Aan-lei refers to three kinds of processing and assembly contracts, and yi-bu one kind of compensation trade.
approved, with a total contracted value of US$ 40.37 billion, of which US$ 17.23 billion had been utilised (see table 4.2 ).

It has been shown in Chapter 3 that, compared to other developing countries, China as a developing host country has achieved outstanding success in attracting DFI, whether in terms of the absolute value, or in terms of its share in the flows of DFI to developing countries. In 1988, China received 21 per cent of total DFI to all developing countries (see Chapter 3 for details.)

<table>
<thead>
<tr>
<th>Table 4.1. Total inflow of FI to China, 1979-1988¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>category</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>ELs</td>
</tr>
<tr>
<td>DFI</td>
</tr>
<tr>
<td>of which</td>
</tr>
<tr>
<td>JVs</td>
</tr>
<tr>
<td>CIJVS</td>
</tr>
<tr>
<td>WFOs</td>
</tr>
<tr>
<td>CEs</td>
</tr>
<tr>
<td>Commercial Credits (CCs)</td>
</tr>
</tbody>
</table>

Note: Data on FI inflow in 1989 is not available. In 1990, The contracted FI amounted to US$ 12.33 billion, and utilized FI US$10.9 billion (see Remin Ribao, overseas edition, 24 Jan, 1991, p.1.). Assuming there were no changes in the inflow between 1989 and 1990, the estimated amount of utilized FI in China by end of 1990 should be US$ 69.14 billion, and contracted FI US$103.85 billion.

Compared to the inflow of foreign debt, however, the success in attracting DFI is less impressive. Unlike the situation before 1949, foreign loans have made up about 70 per cent of total FI in China between 1979 and

1990, despite the fact that the Chinese government had intended to discourage foreign loans and encourage DFI.

### 4.1.2. DFI Inflow and Annual Changes

There has been a steady increase in utilized DFI in China, up to 1988, even though the contracted volume of DFI signed each year fluctuated substantially (see table 4.2.), peaking in 1985 and 1988. After 1988, the pace of DFI has stagnated partly due to the economic sanctions that western countries imposed on China in the aftermath of the political repression in June of 1989, partly because the austerity program, starting from late 1988, has reduced business opportunities in China.

#### Table 4.2. DFI in China from 1979 to 1990

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of contracts</th>
<th>Contracted value</th>
<th>Utilized value</th>
</tr>
</thead>
<tbody>
<tr>
<td>79-82</td>
<td>922</td>
<td>7.00</td>
<td>1.77</td>
</tr>
<tr>
<td>1983</td>
<td>470</td>
<td>1.92</td>
<td>0.92</td>
</tr>
<tr>
<td>1984</td>
<td>1,856</td>
<td>2.88</td>
<td>1.42</td>
</tr>
<tr>
<td>1985</td>
<td>3,073</td>
<td>6.33</td>
<td>1.96</td>
</tr>
<tr>
<td>1986</td>
<td>1,498</td>
<td>3.33</td>
<td>2.24</td>
</tr>
<tr>
<td>1987</td>
<td>2,233</td>
<td>4.32</td>
<td>2.65</td>
</tr>
<tr>
<td>1988</td>
<td>5,945</td>
<td>6.19</td>
<td>3.74</td>
</tr>
<tr>
<td>1989</td>
<td>5,784</td>
<td>5.6</td>
<td>3.3</td>
</tr>
<tr>
<td>1990</td>
<td>6,276</td>
<td>6.57</td>
<td>3.41</td>
</tr>
<tr>
<td>Total</td>
<td>28,015</td>
<td>40.37</td>
<td>17.23</td>
</tr>
</tbody>
</table>

1. According to table 4.1., the proportion of DFI in total utilized FI is 24.3 per cent during 1979-1988; the proportion of DFI is 33.8 per cent in 1990 (see RR, 24 Jan., 1991), similar to the one in 1989.

Christopher Engholm explains these fluctuation before 1988 in terms of a circle that portrays the process that the Chinese government took to offer more concessions.\(^1\) He divides the period from 1979 to 1988 in three phases: 1979-1981, 1982-1984, and 1985-1988. Within each of these phases, he identifies five sequential stages in a circle, starting with the Chinese offering concessions to foreign investors and ending with internal debate in China on whether and how the investment environment should be improved. The result of this debate was more concessions from the Chinese government and so the next phase starts.

However his model fails to catch the ups and downs of the DFI inflow, whether of contracted or utilized value. It also completely disregards the fact that the inflow of DFI is closely related, first to domestic economic conditions, and second to the world economic situation, although bargaining between foreign investors and the Chinese government also plays a part.

Graph 4.1. Relationship between inflow of DFI and domestic economic fluctuation in China

\[ y = .008x - 2.12, \text{ R-squared: } .986 \]

The attached graph shows the regression line between utilized DFI (UDFI) and fluctuations in the domestic economy as measured by fixed asset investment (FAI) between 1983 and 1990. The regression line has a very high value of R-squared. It also passes well the necessary t-test (20.216) and DW test (2.569). That is to say, the inflow of DFI is to a great extent determined by the fluctuations in the domestic economy.

The impact of the domestic economic situation on DFI is not only reflected in the perception of investment opportunities by foreign investors. It also affects the inflow of DFI through local partners. As table 4.1 shows, WFOEs are only a fraction of the total FIEs in China. So the availability of a local partner is a factor that could significantly influence the inflow of DFI. Local partners' financial capability in joining FIEs, however, is restricted when the domestic economy is not booming. Indeed, this is the main reason why WFOEs have become so popular since the austerity program started in late 1988.¹

4.1.3. Sources of DFI

One of the most important features of DFI in China is that it has been dominated by investment from Asian countries, particularly Hong Kong. As table 4.3 shows, Hong Kong (and Macau), Taiwan, Singapore, and Japan together contributed 69.3 per cent of China's total committed DFI by September of 1990. Hong Kong (and Macau) alone made up 59.7 per cent. The dominance of Hong Kong is most significant in Guangdong province. During the 1979-1988 period, 92.8 per cent of FIEs established in the province were with investors from Hong Kong and Macau.² Regrettably, however, data on the source of utilized DFI are not available.

Why has DFI in China been dominated by Hong Kong and other Asian countries? First, there is evidence suggesting that the motivation of investors from Hong Kong or other Asian sources is rather different from non-Asian sources. Investors from Asian NICs, and to a lesser extent from Japan, stress the importance of low cost labour and land in most cases,

¹. The number of WFOEs increased from 46 in 1987 to 410 in 1988 and reached 1861 in 1990.
while investors from other countries often lay emphasis on the prospect of the domestic market.

Surveys in 1979 and 1982 of Hong Kong firms investing abroad by Prof. Chen of the University of Hong Kong in 1979 and 1982 reveal that there are two major motivations.\(^1\) One is connected with factor (land, labour) supplies and prices; the other concerns the assurance of sustained growth in exports in the face of trade restrictions and demand saturation in third markets. But the stress was overwhelmingly laid on the former, with the availability of labour and the cost of labour being the two top factors.\(^2\)

Table 4.3. Source of Committed DFI in China\(^3\)

<table>
<thead>
<tr>
<th>Source</th>
<th>No. of FIEs</th>
<th>committed DFI (US$100 m)</th>
<th>Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>26,568</td>
<td>378.54</td>
<td>100</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>19,573</td>
<td>225.98</td>
<td>59.7</td>
</tr>
<tr>
<td>and Macau</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S.A.</td>
<td>1062</td>
<td>29.76</td>
<td>7.8</td>
</tr>
<tr>
<td>Japan</td>
<td>1082</td>
<td>4.9</td>
<td>1.2</td>
</tr>
<tr>
<td>Taiwan</td>
<td>1188</td>
<td>11.00</td>
<td>2.9</td>
</tr>
<tr>
<td>Singapore</td>
<td>409</td>
<td>6.81</td>
<td>1.8</td>
</tr>
<tr>
<td>W. Germany</td>
<td>80</td>
<td>4.97</td>
<td>1.3</td>
</tr>
<tr>
<td>Others</td>
<td>3174</td>
<td>81.38</td>
<td>21.6</td>
</tr>
</tbody>
</table>

There seems to be something in common between Hong Kong and Japanese companies in this respect, although the latter seems to be more market-

---


\(^2\) *ibid.*, 1983, p. 111.

\(^3\) *Hong Kong, ER*, No. 2201-2, 1 Jan., 1991, p. 1.
oriented. In a survey carried out by the JETRO (HK)\(^1\) in Nov. 1989, covering 23 of the Japanese manufacturing investment projects (including 7 subcontracting projects) in Shenzhen city (including both the Shenzhen SEZ and Baoan county), and accounting for 62 per cent of total Japanese investment projects in the city, it was found that the most important motivation for Japanese companies to invest in Shenzhen was also the low cost of labour (65.2 per cent); the second motivation was the desire to expand and maintain a share in the Chinese market (39.1 per cent).

By comparison, American companies are overwhelmingly marketing-motivated. According to a survey by C. Engholm\(^2\), conducted between 1986 and 1988, among the U.S. firms having investment in China, 92 per cent of them indicated that they came to invest in China in order to "sell products in China".

The result of this survey among Hong Kong companies also confirms Chen's point.\(^3\) Among the 19 Hong Kong companies surveyed, 14 included low-cost labour and land as one of the four most important reasons for investing in Guangdong. Only 5 companies indicated an interest in access to the Chinese market.

The motivational difference between investors from Hong Kong or other Asian NICs and investors from western developed countries reflects first the different conditions of their respective home economies and second their respective positions in the international production. The Asian NICs, or even Japan, have had a significant labour-intensive production component in their economy. On the other hand, they have traditionally engaged in supplying labour-intensive products to the U.S. and Europe market. As their economies develop, their production cost has grown very rapidly so that there is a widespread pressure within the economy to reallocate some of these operations to low-cost overseas locations in order to maintain the competitiveness of their products. Moreover, in some of these economies, pre-eminently Hong Kong, there is a widespread shortage of labour (see Appendix 5).

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\(^1\) Japan Export Trade Research Organization (JETRO)(HK), "Results of a Survey on Japanese Investment Enterprises in Shenzhen", memo, February 1990, Hong Kong.
\(^2\) Engholm, C. op.cit., p. 39.
\(^3\) For details of the survey, see Chapter 6.
As far as western developed countries are concerned, although the cost difference between their home production and overseas production in developing countries is significant, labour-intensive production is no longer a significant component in their economic activities. Moreover, they tend to utilize labour-intensive components from the NICs which can provide better quality products than low-income countries such as China. Thus investors from western developed countries are less influenced by cost of production and more concerned with marketing potential in China. In other words, the latter is more sensitive to the domestic economic situation.

Second, investors from neighbouring Asian countries, mainly Hong Kong, can offer certain firm-specific advantages desired by their Chinese partners. The studies by Professor Chen (mentioned above) identify the advantages of Hong Kong firms as more "overall experience and better management and marketing skills" rather than in advanced technology.¹

His view is largely confirmed by John Thoburn et al. The latter further suggest:

"... these advantages lie at the heart of economic reform in China. China's closeness to the outside world for many years has left it lacking in knowledge of western tastes and the requirements of product quality for export, as well as lacking close customer contacts with western buyers. Although the technology for such industries is easily available (to those with the foreign exchange to buy it), simply bringing in machinery from abroad has not been sufficient to transfer the technology in an unreformed situation where managers and workers follow traditional state-company practices of 'eating from the communal pot'... and being immune from dismissal whatever their performance." ²

In other words, Hong Kong firms not only provide local firms with knowledge of western tastes, quality control and overseas customer contacts, they also help to create an environment in which western technology can be effectively absorbed.

². John Thoburn et al., op cit., p. 33.
Third, investors from neighbouring Asian countries and regions have cultural and linguistic advantages over other investors in China, particularly in Guangdong. In my survey of 19 Hong Kong companies, 11 companies included familiarity with Guangdong’s culture and language as one of the four most important reasons for investing in Guangdong. This is particularly important when it is taken into account that many domestic partners are not major producers and do not have the human resources to deal with investors speaking a different language.

Fourth, it may be suggested that investors from Asian countries tend to be politically apathetic either because of cultural background or because of the importance of Chinese business to them. They are therefore less troubled by the political system in China and often more permissive in dealing with investment there. This is particularly apparent from the different reactions that investors from Asian countries and western investors had towards investing in China after the Tiananmen Incident in June of 1989. In the following months, many western investors stayed away, while investors from Hong Kong, Japan, Taiwan and other Asian countries resumed their investment in China within a short period.

Finally, the special treatment given to overseas Chinese by the Chinese government (see Chapter 5) may also have had an impact on the pattern of investment sources.

4.1.4. Geographical Distribution of DFI

Almost to the same extent to which DFI is dominated by Hong Kong investment, DFI in China is concentrated in the eastern coastal areas, particularly in Guangdong and to a lesser extent Fujian (see table 4.4). This is partly because Guangdong is the closest Chinese neighbour to Hong Kong.

In the investing companies survey, there is only one factor on which all companies agreed in their decision making of investing in Guangdong. That factor is Guangdong’s proximity to Hong Kong. In comparison, only 7 out of 19 companies indicate that investment incentives available in Guangdong were one of the four most important factors.
Table 4.4. Geographical distribution of China's utilized DFI by end of 1987

<table>
<thead>
<tr>
<th>Areas</th>
<th>No. of provinces</th>
<th>Share of FIEs (%)</th>
<th>Share of utilized DFI (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>29</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Coastal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>91.6</td>
<td>93.9*</td>
</tr>
<tr>
<td></td>
<td>of which</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Guangdong</td>
<td>1</td>
<td>61.7</td>
</tr>
<tr>
<td></td>
<td>Fujian</td>
<td>1</td>
<td>10.6</td>
</tr>
<tr>
<td>Central</td>
<td>9</td>
<td>6.5</td>
<td>4.0**</td>
</tr>
<tr>
<td>Western</td>
<td>9</td>
<td>1.9</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Note:
*: excludes Shandong
**: excludes Anhui and Jilin.

The implication is that the western area's share of utilized DFI is overstated.

Why is closeness to Hong Kong so important? The interviews reveal that this is decided by the nature of the operations that the FIEs carry out. They are characterized by close ties between Guangdong operations and Hong Kong investing companies: the latter supplied materials, products specifications, technical and managerial expertise, and handled most of the exports. In a business such as this, timely delivery and control of quality are most important. Guangdong's proximity to Hong Kong makes swift transport at relatively low-cost possible so that managerial and technical personnel can frequently go to Guangdong factories.

1. Source of the data for 29 provinces: Shanghai Industrial and Economic Journal, 7 July 1988 (reported in Richard Pomfret, Investing in China: Ten Years of the 'Open Door' Policy, London, Harvester Wheatsheaf, 1991, p. 75). Aggregated by this author. "Provinces" also covers autonomous regions and the three municipalities. There seems to be some discrepancy between these data and the official statistical data; for Guangdong's share in the latter, see Appendix 3.

2. This feature was evident from the very beginning. Professor Chen (1983, op cit., p. 100) regarded this to be unique to the operations of Hong Kong-based firms in China which is not normally shared by Hong Kong investment elsewhere.
In this regard, Guangdong is unrivalled. It is the only on-land neighbour of Hong Kong, and a very close one. It takes only 2 hours to travel from Hong Kong to Guangzhou, the capital city of Guangdong, by train, and less than one hour to Shenzhen, the largest Special Economic Zone (SEZ) in China, where thousands of FIEs are clustered just across the border. The saving in time and money is enormous. According to a survey conducted by the Hong Kong Industry Association in 1989, over 15,000 Hong Kong business personnel commute between Hong Kong and Guangdong, working in their Guangdong factories. Given the time and cost, this kind of arrangement is impossible for any other localities.

Another important factor is the availability and cost of transport, because transport in China is relatively backward. One of the surveyed companies decided to invest in Zhuhai after comparing three locations: Zhuhai, Tianjin and Wuhan. Both Tianjin and Wuhan are major industrial centres and therefore technically desirable locations. But the transport cost for the products from Zhuhai is only HK$ 60 per ton, while it would be HK$ 300 per ton from Tianjin. In addition, it takes only half a day by land for cargo to travel from Zhuhai to HK, whereas it would take two days for it to come from Tianjin by train, provided a space on the train is available, which can be not taken for granted. The problems with Wuhan are similar.

But Guangdong also has disadvantages. For example, it lacks raw materials. It had a weak industrial basis prior to 1979, and therefore lacks skilled workers. As a consequence of the steady growth of job opportunities now, even unskilled labour is in short supply and has become more expensive than elsewhere in China.

There are a number of ways to get around these problems. To meet the demand for skilled and unskilled workers, hundreds of thousands of workers have been brought into Guangdong from all over China. That also helps to keep wage rates down.

Hong Kong businessmen had other ways. One company visited was a machine tool producer which had for many years imported parts from inland China and turned them into finished products, selling some of these back into China. From 1986, this business was stopped due to restrictions
imposed by the Chinese government on the imports of some varieties of the product. In the meantime, EJVs were allowed to sell some of the products in China.

In response, the company went to invest in Dongguan, a small city in Guangdong on the main motorway line. Nowadays, the parts are still bought from inland China, where the production costs were low, and coupled with government subsidies for inland military factories, the prices were low too. The parts were then processed into finished products in the Guangdong factory, some of which were sold in China, some exported to HK. The case exemplifies the use of Guangdong as a middleman between HK and the resource-abundant inland areas. It also illustrates a number of other features such as DFI as a way to overcome market barriers etc.

Another company benefited from combining the geographical advantages of Guangdong and the relative technical superiority of an inland factory. An EJV was set up in Shenzhen, involving the inland factory, a local partner and the HK company. The Hong Kong company used to have subcontracting arrangements with the inland factory in Xian, the capital city of Shannxi province in northeast of China. The problem with the Xian factory was that there was only a pair of trains from Xian to HK every month, in addition to the higher cost. But the technical capacity of the Xian factory was necessary for the production. The setting up of this EJV satisfactorily solved the problem.

The assessment of the comparative advantages of Guangdong over other Chinese localities is nonetheless heavily dependent on the nature of the production. Domestic market oriented production, for example, particularly where products are perishable or costly to transport, prefer locations in the North and other inland areas where the market is less penetrated by DFI. Another example would be production requiring high-skilled workers and sophisticated processing of materials, which would be much better off locating in the old industrial bases of the East and North such as Shanghai. This is indeed exactly what has happened.

There are also differentials within the smaller area of Guangdong province. Table 4.5 shows the geographical distribution of FI in Guangdong between the Pearl River Delta Economic Open Area
(PRDEOA) and the rest of Guangdong at the end of 1987. The difference between the PRDEOA and other areas within Guangdong is much smaller than the same difference at a national level (compare to table 4.4.)

Table 4.5. Geographical distribution of utilized FI in Guangdong, end-1987

<table>
<thead>
<tr>
<th>Areas</th>
<th>NO. of Counties</th>
<th>No. of Cities</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRDEOA*</td>
<td>52 (68.4%)</td>
<td>15</td>
<td>89%</td>
</tr>
<tr>
<td>Others</td>
<td>24 (31.6%)</td>
<td>3</td>
<td>11%</td>
</tr>
</tbody>
</table>

Note:
PRDEOA: Pearl River Delta Economic Open Area.
* Excludes data for two counties and the urban district of Shantou city. The implication is that the share of PRDEOA in total FI is actually understated.

Regional differentials in Guangdong are less influenced by policy than inter-provincial differentials within the country. Alternatively could this be because the locational factor, i.e., the geographical distance between Hong Kong and investment locations is less important in Guangdong? A study by researchers from the Chinese University of Hong Kong suggested that neither linear nor nonlinear relationships between DFI, in terms of number of projects or investment value (it is unknown whether the value is utilized one or committed one), and the physical distance from Hong Kong was significant at the 0.05 level of significance for all the years up to 1986. That is to say, the distribution of DFI in Guangdong does not follow a distance-decay pattern as a diffusion usually does.\(^2\) In other words, distance from Hong Kong is not a significant factor in explaining the geographical distribution of DFI in Guangdong.

The above study may be challenged on the ground that, even under the classical assumption about industrial location space (that is, homogeneous),

\(^1\) SSB, \textit{Zhongguo Yanhai Jingji Kaifangqu Yejiu He Tongji Zilia (ZYJKYHTZ)} (Studies on, and Statistics of, China's Coastal Economic Open Areas), 1989, p. 3, 149, 555
physical distance is not the critical factor. The critical factor should be economic distance. Moreover, the actual space here is not homogeneous.

Data on the economic distance between Hong Kong and various locations in Guangdong, measured by transport charges per standard container, is obtained from the Hong Kong Container Tractor Owner Association Limited. It turns out that there is no difference between economic distance \( y \) and physical distance \( x \). The former is related to the latter by the following formula: \( y = 2400 + 16x \).

Table 4.5. Determinants of geographical distribution of DFI in Guangdong

<table>
<thead>
<tr>
<th>Factors</th>
<th>Economic distance</th>
<th>GDP</th>
<th>Closeness</th>
<th>EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of freedom</td>
<td>29</td>
<td>45</td>
<td>45</td>
<td>6</td>
</tr>
<tr>
<td>adjusted R-squared</td>
<td>0.112</td>
<td>0.228</td>
<td>-0.007</td>
<td>0.997</td>
</tr>
<tr>
<td>t-value</td>
<td>2.157</td>
<td>3.779</td>
<td>0.816</td>
<td>44.63</td>
</tr>
<tr>
<td>Probability</td>
<td>0.0397</td>
<td>0.005</td>
<td>0.4187</td>
<td>0.0001</td>
</tr>
<tr>
<td>DW test</td>
<td>1.60</td>
<td>2.139</td>
<td>2.01</td>
<td>2.499</td>
</tr>
</tbody>
</table>

Note: EL refers to the amount of absorbed external loans.

Using data on the distribution of utilized foreign capital by the end of 1987 within the PRDEOA, an attempt is made to test the following hypothesis: that the inflow of DFI is positively associated with four factors: policy status, economic distance from Hong Kong, local economy's magnitude, and the amount of utilized foreign loans. Policy status (i.e. closeness) is measured by the time when the region (a municipality or county) became included in PRDEOA. The later it was opened, the bigger the value is. Economic distance is measured by the rate of transport cost for a standard container between Hong Kong and the locality in question. The local economy's magnitude is measured by its GDP. The original data is included in Appendix 4.

The result of the simple regression between utilized DFI and each of these four factors shows:
1). Economic distance is only statistically significant with 95 per cent confidence, but insignificant with 98 per cent confidence;
2). Policy status is statistically insignificant with 95 per cent confidence;
3). GDP is statistically significant with 99 per cent confidence;
4). The amount of absorbed external loans is statistically significant with 99.98 per cent confidence.

That is to say, contrary to general belief that the closer a location is to Hong Kong, the larger amount its DFI flow is, the distance factor maybe not so significant. Furthermore, it indicates that the inflow of DFI is positively associated with the amount of foreign loans that had been utilized.\(^1\) It also shed doubts on the conviction that the policy factor plays a decisive role in the inflow of DFI in different localities. Indeed, the only factor of these four that has significantly influenced the inflow of DFI in Guangdong is the level of GDP. This however can not provide a full explanation for the distribution. As a matter of fact, its adjusted R-squared value is only 0.228. That means that there must be other factors that are at work.

What might they be? The result of the investing companies’ survey perhaps provides some clues. The respondents were asked to give the four most important factors influencing their decisions to decide their investment locations within Guangdong. The result in order of score is: closeness to Hong Kong (21), infrastructure (15), investment incentives (9), low cost of labour and land (8) and a suitable local partner (8). Closeness to Hong Kong once again scores highest. But two new factors have been brought in, compared with the factors influencing locational decision-making in international or national level. They are: infrastructure and the suitability of local partners.

It is interesting to note that, during the process of choosing their Chinese partner, the attitude of local government is usually one of the important factors taken into account. Foreign investors seems not only to be concerned with the concessions that local governments offer in monetary terms, but also they take into account impressionistic views of the general

\(^1\) This point needs further test, since the size of the sample is too small here (including only 7 cases).
cooperativeness of the governments. One interviewee said: "China is a society ruled by persons rather than laws". So the attitude of the local officials sometimes means more than the abstract laws or regulations. It is suggested here that local government's attitude is not as superficial as it appears. A great deal has been done in Guangdong by local governments to attract and utilize DFI in manufacturing, which will be explored later.

4.1.5. Industrial and Sectorial Distribution of DFI

Judging from scattered information, DFI in China is unevenly distributed not only geographically but also industrially. But unfortunately, the Chinese government has not published any statistics on the industrial distribution of utilized DFI. Although distribution data are available for committed DFI (see Table 4.6), it must be stressed that the categories in the statistics have changed from year to year so that the quality of the data is not very satisfactory.

What is most evident from table 4.6 is the growing share of industry in total committed DFI: it steadily increased from 16.6 per cent in 1983 to 47.9 per cent in 1987. Another increasing sector is agriculture, from 0.9 per cent to 3.4 per cent. Whereas the share of communication and transport has actually declined from 3.1 per cent to 0.4 per cent during the same period.

This distribution indicates that the Chinese government's policy in more recent years to encourage productive investment (see Chapter 5) may mainly have affected favourably the inflow of DFI in industries; while its impact on agriculture is very limited. As far as the policy impact on investment in communication and transport is concerned, it shows little effect.

Appendix 6 contains the details of the distribution of total committed FI in China, which is only slightly different from that of committed DFI: the share of industry increased relatively slowly from 25.7 per cent in 1984 to 41.3 per cent in 1987; while the share of communication and transport has declined from 9.2 per cent in 1984 to 6.1 per cent in 1987; the share of agriculture also declined from 5.3 per cent in 1984 to 2.1 per cent in 1987.
Table 4.6. Distribution of committed DFI in China, 1983, 1984, 1985, 1987 (US$m)\textsuperscript{1}

<table>
<thead>
<tr>
<th>Trades</th>
<th>1983</th>
<th>1984</th>
<th>1985</th>
<th>1987</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Industry</td>
<td>16.6</td>
<td>24.6</td>
<td>37.6</td>
<td>47.9</td>
</tr>
<tr>
<td>of which:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coal &amp; petroleum</td>
<td>0.0</td>
<td>0.5</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>12.6</td>
<td>18.7</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Basic material</td>
<td>4.0</td>
<td>5.4</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Communicat. &amp; transp.</td>
<td>3.1</td>
<td>2.9</td>
<td>1.7</td>
<td>0.4</td>
</tr>
<tr>
<td>Agriculture</td>
<td>0.9</td>
<td>2.7</td>
<td>2.0</td>
<td>3.4</td>
</tr>
<tr>
<td>Geological &amp; prospecting</td>
<td>53.3</td>
<td></td>
<td>5.7</td>
<td></td>
</tr>
<tr>
<td>Tourism &amp; commerce</td>
<td>7.0</td>
<td>36.5</td>
<td>46.3</td>
<td>41.9</td>
</tr>
<tr>
<td>Culture &amp; Educa. &amp; health</td>
<td>0.2</td>
<td>0.7</td>
<td>0.9</td>
<td>0.8</td>
</tr>
<tr>
<td>Others</td>
<td>18.9</td>
<td>33.1</td>
<td>5.8</td>
<td>5.6</td>
</tr>
</tbody>
</table>

Note: the coverage of following categories has been constant:
Manufacturing: electronics, light industries, foodstuff, textile;
Basic material industries: metallurgy, non-ferrous metals, chemical industry, building and building material.
Agriculture: planting, forestry, husbandry and fishery
The content of the following categories has been changed:
Geological & prospecting: data in 1983 was labelled as "sea oil exploration"
Tourism and commerce: the data for 1985 and 1987 include the followings: construction, commerce and catering, real estate and public utility.
Culture, Education and health: the data for 1985 and 1987 also include the following: welfare, arts.

It should be pointed out that this distribution pattern does not raise the share of these three sections in general Chinese investment pattern. Because the shares of these three sectors in general Chinese investment is substantially higher than those in FI: in China's basic construction investment, the share of industry increased from 46.0 per cent in 1984 to

\textsuperscript{1} SSB, China's Almanac of External Economic Relationship and Foreign Trade (CAEEFT), various issues.
50.8 in 1987; agriculture declined from 5.0 per cent to 3.2 per cent; transport and communication roughly stabilized (14.6 per cent in 1984, and 14.1 per cent in 1987).\(^1\)

In comparison, the distribution of FI in Guangdong is relatively concentrated in industries (see table 4.7), particularly in more recent years. The share of industry in committed FI in Guangdong was 38.3 per cent in 1983, but rose to 74.5 per cent in 1987. As a result, this pattern compares to the general investment pattern in the province favourably: during 1979 to 1988, the share of industry in general (basic construction only) investment was 36.2 per cent, but as high as 59.0 per cent in utilized FI.\(^2\)

**Table 4.7 Distribution of FI in Guangdong (%) \(^3\)**

<table>
<thead>
<tr>
<th>Trades</th>
<th>1983</th>
<th></th>
<th></th>
<th>1987</th>
<th></th>
<th></th>
<th>1979-87</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CFI</td>
<td>UFI</td>
<td>CFI</td>
<td>UFI</td>
<td>CFI</td>
<td>UFI</td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>3.8</td>
<td>3.0</td>
<td>4.3</td>
<td>3.8</td>
<td>4.0</td>
<td>3.8</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>38.3</td>
<td>48.2</td>
<td>74.5</td>
<td>69.0</td>
<td>48.0</td>
<td>59.0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.2</td>
</tr>
<tr>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3.7</td>
<td>3.7</td>
<td>1.7</td>
<td>1.7</td>
</tr>
<tr>
<td>5</td>
<td>10.9</td>
<td>5.8</td>
<td>0.8</td>
<td>1.2</td>
<td>5.7</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>12.8</td>
<td>24.3</td>
<td>0.4</td>
<td>0.7</td>
<td>7.6</td>
<td>5.7</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>23.0</td>
<td>15.8</td>
<td>8.5</td>
<td>6.7</td>
<td>27.7</td>
<td>19.3</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>3.4</td>
<td>0.1</td>
<td>0.1</td>
<td>0.2</td>
<td>1.0</td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>7.8</td>
<td>2.8</td>
<td>7.7</td>
<td>14.6</td>
<td>4.3</td>
<td>5.4</td>
<td></td>
</tr>
</tbody>
</table>

**Note:**

CFI: committed foreign investment;
UFI: utilized foreign investment.

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4.2. Received Assessment

So far the economic assessment in the world at large towards the open policy, or more specifically DFI policy, in China has been largely positive.

Among China experts, there is also much praise. For instance, Richard Pomfret argues:

"It is difficult to see the first ten years of China's 'open door' policy towards DFI as anything other than a resounding economic success. After the inevitably slow start in bringing together capitalist businessmen and an autarchic planned economy, DFI has played a positive and significant role in the process of reducing the costs of catching up with more developed economies. The Chinese goals of increased exports and technology transfer have been met, although not exactly as China’s policy makers intended; the exports are not elevators and cars and the technology transfer is for the most part not embodied in automated state of art factories."¹

He has however oversimplified the "the Chinese goals". Moreover, he has not determined to what extent the goals, as so defined, have been achieved. Furthermore, he has not specified the content of the so-called "reducing the costs of catching up with the more developed economies".

In similar spirit, but less enthusiastically, Zafer Khan, who recognizes the goals of the DFI policy as "to accelerate the process of technology transfer, to promote exports and to provide foreign exchange", remarks:

"China has achieved reasonable success in meeting its DFI objectives. ...... China has gained by DFI through transfer of foreign savings, the increase in government revenues, knowledge of modern enterprise management techniques, employment and higher incomes of workers. There has also been a spillover effect of

¹ Richard Pomfret, op cit., p. 137.
SEZs and open cities on adjoining areas which have been able to attract DFI.” 1

He does not raise the issue of cost at all. On the other hand, he considerably extends the scope of the policy objectives and the related success without offering further elaboration or evidence.

In comparison, a more prudent view is offered by John Thoburn et al:

"Our interviews (in Guangdong, ZL-Y) suggest that few local materials are purchased, so few backward linkages are generated...... The main economic benefit, then, at present is the wage bill,...... Externalities include labour training effects as trained workers move from foreign to domestic enterprises and the diffusion of standard of product quality and work inputs will have been especially instructive.”2

But again, the issue of cost is not raised. On the other hand, Thoburn et al are mainly concerned with micro-economic assessment. In a economy such as China where macro-economic policy still play a dominant role, it is most important to determine the macro-economic benefit and cost of such a policy.

4.3. Conclusion

This chapter has analyzed the various characteristics of FI in China, including the received assessment. The picture appears to be conflicting at best: on the one hand, China has achieved greater success in attracting a substantial amount of FI inflow compared with other developing countries; on the other hand, however, the composition of the inflow has not been as desirable as hoped - more than two-thirds of it has been made up of foreign loans rather than DFI, while the latter can provide other benefits than financial resources to host countries, and the former can not.

2. John Thoburn et al., op cit., p. 165.
As far as the source of DFI is concerned, it has been dominated by investment from Asian developing neighbours, particularly Hong Kong. Given the fact that firms from developing countries usually possess less advanced technologies, it is difficult to say this domination proves the great success of the policy.

Furthermore, the distribution of the DFI also leaves something to be desired, for: first, the geographical distribution has been heavily concentrated in the coastal areas, particularly in Guangdong and Fujian; second, the industrial distribution has not contributed significantly to the improvement of China's existing industrial structure in the sense that it provides little investment in some of the most desirable areas such as agriculture, energy, transport and communication, although the share of investment in industry has increased considerably in more recent years.

In contrast, however, the few attempted assessments have often been overwhelmed by the sheer speed of growth of FI and the overall economic growth in China in the 1980s. As a result, they have been largely positive, without scrutinizing relevant evidence - one factor has been the paucity of available data. Indeed, neither the policy objectives nor the evidence have been carefully examined.

In order to attempt such an examination, we must investigate, first, whether what has happened is what the policy intended; second, at what cost the changes have occurred. To start with, Chapter 5 examines the policy objectives.
5.1. Policy Objectives

As shown in Chapter 1, to utilize DFI is part of the wider effort of the Chinese government to promote economic growth in China, and more specifically, implement the Four Modernizations Programme. The programme initially had no quantitative measurement of the targets, when it was announced at the 11th National Party Congress for the first time in 1975.1 In 1978, however, Deng Xiaoping, the paramount Chinese leader after Mao, indicated that the modernization programme aimed to raise China's per capita national income to US$ 1,000 by the year 2000.2 In 1982, the economic goal was laid down at the 12th National Congress of the CCP. It was stated that:

"The overall target of economic construction of our country in the next twenty years between 1981 and 2000 is, whilst constantly improving economic efficiency, to quadruple the national gross industrial and agricultural output, i.e., from RMB 710 billion in 1980 to RMB 2800 billion in 2000."3

The target is not expressed in terms of per capita national income here. But this remains the policy goal, as shown by Deng Xiaoping in 1984. During a meeting with some Japanese visitors, he mentioned a target of a

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per capita national income of US$ 800 (as opposed to the previous level of US$ 1000.)

To attain this quadrupling of China's gross industrial and agricultural output requires output to grow by 7.1 per cent annually during 1981-2000. This is obviously a difficult task. Only a few countries - such as Japan and South Korea - have managed to maintain such a high growth over a prolonged period.

Nonetheless, China's past experience appears to be encouraging. During the period 1953 to 1978, China's gross industrial and agricultural output grew by 8.2 per cent annually. That high growth was however largely attained at the expense of the people's livelihood. In order to support the high growth, the domestic accumulation rate was maintained at average 28.5 per cent of national income. It was politically undesirable to continue to maintain such a high accumulation rate after the 1970s, as the Chinese people became largely disillusioned by the promise of ideology, which previously served as the main incentive in all fields of Chinese life.

In any case, the declining productivity of capital made the shortage of capital even more acute in China. A World Bank study concluded that the growth of productivity in China was either very small or minus prior to 1980, depending on the weight attached to the two inputs, i.e., capital and labour, employed to calculate the total factor productivity.

The attainment of the target thus required either a substantial inflow of external financial resources or significant improvement of productivity, or preferably both. As a matter of fact, it has been projected that, if the growth of productivity maintained its level of the early 1980s, to achieve the target would require a domestic accumulation rate of 29 per cent of national income during the period, plus a stock of foreign debt of US$ 158.34 billion by the year 2000.

3. Ibid, p. 342
In the face of all these difficulties, the Chinese government launched economic reforms at home and an open policy abroad, as discussed in chapter 1. Then Premier Zhao Ziyang pointed out:

"Invigorating the economy and opening up to the outside world are two basic guidelines for our modernization programme. They supplement each other and help each other forward.....China's modernization drive requires us to open up to the outside world and expand economic and technical exchange with others."  

The official thinking is that while economic reform would improve the efficiency of the economy by properly defining the economic relationships between the state and state-owned enterprises and encouraging the later to take initiatives in improving economic efficiency, the open policy would help in two principal ways: first, it would bring in much-needed foreign capital to help ease the shortage of domestic capital; second, it would bring in new technology and advanced western management skills, and therefore help the growth of productivity.

Thus the overall goal of encouraging DFI is to help attain the target of quadrupling China's gross industrial and agricultural output by the year 2000. The Chinese government has not however defined the specific objectives of encouraging DFI with clarity. There has been no stated plan to elaborate the objectives, strategy and implementation measures for encouraging and utilizing DFI as one would like to see for evaluation purpose, despite the fact that the authority has been calling for such a plan for a long time. Admittedly, it is difficult to define quantitatively the objectives of such a policy, since the inflow of DFI is largely beyond the control of policy-makers. This is particularly so in the case of China, because the country was, for a long period, insulated from the outside world, and consequently the planners feel great uncertainty in dealing with DFI.

There have been elaborating speeches made by officials and articles printed in the press. A more authoritative source is perhaps the collection of some 200 laws, regulations and provisions that have been promulgated in relation

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to DFI since 1979, when the first, the Law on Joint Ventures Using Chinese and Foreign Investment, was passed.

An examination of these sources suggests that the government’s public economic aims in encouraging DFI are as follows:

First, one of the most important objectives, particularly in the earlier years, was to utilize foreign financial resources to expand China’s capital formation. The late Secretary General of the CCP stressed that “it is because the top difficulty that we are facing in our modernization construction drive is the lack of capital that we have attached such an importance to attracting foreign capital.”

Guo Mu, a state councillor, explained in greater detail:

"... shortage of capital is a prominent difficulty in the economic development of our country. In every year’s planning, there are always some projects that should be included but have to be dropped due to shortage of capital. How to solve the problem of capital shortage is a matter of significance to the pacing of the Four Modernization drive...... We ought to speed up utilizing foreign capital."

However, the Chinese leadership feels that the mere inflow of foreign capital is not enough, because there was another objective: to introduce advanced technology and management skills through foreign capital. It was here that the advantages of DFI over other forms of foreign capital is recognized, as Hu Yong-bao noted:

"As far as the near future is concerned, in my view, attracting foreign direct investment should be the most important form. It has two main advantages: firstly, the investment is directly linked with the interests of the investors, and the risk is shared; secondly,

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it puts us in a better position to learn advanced technology and management skills."1

And third, DFI had also been regarded as a powerful engine to expand China's exports. While it is generally true that many countries, particularly developing countries, desire to expand their export, the motives behind China's desire to increase its exports has undergone some change over the years.

In the years immediately after the opening-up, the growth of exports was desired mainly to earn foreign exchange to enable China to pay for the import of foreign goods. This perspective was changed somewhat around 1984 to a wider one, that is, China's participation in the international division of labour. Huan Xiang and Pai Lun-zhang, both prominent writers and ranking officials, wrote in 1984:

"Implementing the open policy in our external economic work China's inevitable deepening involvement in the international division of labour; second, facing up to the increasingly fierce competition in the world market."2

Moreover, the aim of China's participation in the international division of labour was related to the improvement of economic efficiency:

"... the aim of external trading should not only be to realize the use value of commodities. It is inadequate to stress using our strong points to make up our weak points through exchanging alone. It should be viewed in the perspective of value adding and social labour saving......"3

The view of China's participation in the international division of labour was further developed in the following years and culminated in Zhao Ziyang's so-called "Coastal China's Development Strategy". Within this strategy, expansion of exports became the engine of economic development. More specifically, the strategy proposed to take advantage of

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the opportunities provided by the readjustment of the international production (ie., re-allocation of labour-intensive production from more developed countries to less developed countries ) as well as the numerous advantages in China's coastal areas, such as rich labour resources, to develop an export-oriented economy there, particularly through the development of labour-intensive industries. The strategy was summed up as " both ends abroad " ( the two ends refer to material supply and product marketing. ), " high volume of imports and exports". 1 In short, according to this strategy, China's coastal area was to become a huge processing and assembling site for the world market, and exports growth was to become the order of the economy.

The fourth objective was to enhance the growth of productivity and the improvement of economic efficiency through DFI. Indeed, the Chinese leadership went so far that the then premier, Zhao Ziyang, advocated that foreign investors should be allowed to manage or invest directly in existing Chinese state-owned enterprises so that the performance of these enterprises could be improved. 2

Besides these aims, there were less important economic considerations, such as increase in earnings of foreign exchange, creation of employment opportunities, or less straightforward economic objectives, such as the positive impact on domestic economic reform. It is generally hoped that the areas where DFI is concentrated can selectively absorb capitalist business management methods and skills introduced through DFI, as developed in modern large-scale production, and experiment in incorporating them with the socialist conditions in China to advance the reform process both within and outside these areas. 3

There are also important political goals such as promoting China's unification with Hong Kong, Macau and Taiwan (see below). Besides, as Chapter 1 suggests, the ultimate aim of the DFI policy was to maintain the CCP's political authority, as the Party has come to realize by late 1970s

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that the failure to promote economic growth will be fatal to its political life in China.

This thesis will focus on the above four economic objectives, although other less-defined objectives, both economic and political, will be touched upon where appropriate. Moreover, an effort will be made to identify the positive and negative results, that are not stated as aims, of the policy.

5.2. Strategies and Implementation of the Policy

In order to achieve the above objectives, the Chinese Government has adopted two important strategies, including an industrial strategy to promote "productive" (mainly manufacturing) DFI, particularly export-oriented and technically-advanced DFI, and a strong regional policy to concentrate DFI in the geographically more accessible and economically more developed east coast areas. It also adopted various administrative measures, including first, increasing liberalization over investment forms; second, giving special encouragement to overseas Chinese investors; and third, administrative decentralization to allow local governments to play an active role.

To implement these strategies and measures, the Chinese Government employs a wide range of means, including application promotion procedure, taxation treatment, import and export control, credit, foreign exchange control and the domestic market accessibility, in addition to many other devices.

5.2.1. Regional Strategy

By far the most coherent and consistent part of the Chinese government's strategy in encouraging DFI is its regional policy, which has been in place since 1984. The essence of this is that, a limited number of areas, mainly on the east coast, were opened for FI earlier than the rest of the country, and that these opened areas, with greater technical and policy capacities, were expected to absorb the foreign capital, technology and management
skills first, then transmit and spread the technology and experience to the less developed inland areas.¹

The starting point of this strategy was the granting of "special policy and flexible measures" to Guangdong and Fujian provinces by the central government in early 1979. This choice of locations was made for numerous reasons, as Ezra F. Vogel has suggested in relation to Guangdong:

First, to encourage national unification with Hong Kong, Macau, since the majority of the residents in these two places are natives from Guangdong; "what more could China do to win over the people of there three territories (Hong Kong, Macau, Taiwan, the last is relevant to Fujian, ZL-Y) than to allow their native provinces special flexibility to gain their goodwill?";

Second, to relieve the state's financial burden; third, Guangdong is the origin of the largest number of overseas Chinese and therefore more able to attract FI from them; fourth, to reduce strains on national resources and the transportation system, if Guangdong could develop into a more export-oriented economy, and earn more foreign exchanges to support technology import elsewhere; fifth, Guangdong's great physical distance from Beijing reduces the political risk that changes in the province might cause changes in the central government; sixth, Guangdong's 'modest' contribution to China's treasury reduce the risk that any failure on Guangdong's part would upset the national budget; seventh and most importantly, Guangdong's cadres were thought more receptive than others to trying new programs, and have access to world technology and management systems through Hong Kong.²

Vogel has also provided a detailed list of those policies for Guangdong.³ They included: more independence in administering economic, social and cultural matters; more authority in determining the distribution and supply of materials and resources, wages and prices. But the most important

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¹. Wang Dacheng, "Notes from the Editor: Coastal Open Economic Areas", Beijing Review, English edition, April, 1985. p.4
content of the policies are four elements, which Vogel describes as "more freedom in managing foreign trade", "fiscal independence", "increased financial independence", and the establishment of three Special Economic Zones (SEZs) on the province’s coast.

Guangdong was allowed to acquire many branches of the state-owned foreign trading corporations, to set up its organizations in Hong Kong and Macau for trade promotion and information gathering, and to retain most of its increased foreign exchange earnings. The "fiscal independence" allowed Guangdong, instead of sending to the central government a certain percentage of taxes collected as other provinces, to pass on only a fixed, relatively low sum, which would stay the same for five years (this arrangement was renewed in 1984 for another five years (1985-1989),¹ and once again in 1989).

Moreover, banks in Guangdong were given more leeway to make their own investment decisions. As a result, the scale and direction of investment in Guangdong was no longer subject to state control. Vogel recorded:

"In order to begin Guangdong's banking independence with loans linked to deposits, the People's Bank agreed in 1980 to assign 400 million yuan per year to Guangdong for three years...(700 millions yuan were used, ZL-Y).... From then on banks in Guangdong were allowed to link lending to deposits and expand loans as they acquired deposits." ²

A similar package was also granted to Fujian province, which is neighbouring to Taiwan. Due to the relatively weak economy in the province, and the limited economic exchange between the province and Taiwan then (largely due to political reasons, the Taiwan authority banned direct trading with the mainland until May of 1991.), only one SEZ was to be set up in Fujian.

² Ezra F. Vogel, op cit., p. 115.
In the four SEZs (three - Shenzhen, Zhuhai, Shantou - are in Guangdong, one - Xiamen - is in Fujian.), preferential conditions are offered to both domestic and foreign investors. A large amount of state funds were invested in the early stages in infrastructure, along with a substantial inflow of DFI. Within years, the areas where the SEZs, particularly Shenzhen and Xiamen, are located were dramatically transformed into China's most prosperous places.

Greatly encouraged by these changes, the conservative attitude within the party started to fade and the central government was soon calling for the SEZs to be windows on the world and to play a demonstration role on a wide range of matters.

The second step was then taken, 14 coastal cities and Hainan Island were made open in 1984 (of which Guangdong accounted for two open cities and Hainan island, the latter then still belonged to the province.). Fifteen Economic and Technological Development Zones (ETDZs) were set up in these 14 open cities. Preferential policies were offered too. They are, however, less favourable than those to the SEZs. But significantly, the incentives offered in these areas distinguish between productive DFI and other DFI, and offer special incentives to the productive ones. The productive ones are entitled the same treatment as DFI in SEZs.

One year after the opening of these coastal cities, the Chinese Government took another step in Feb, 1985 by designating three Coastal Economic Open Areas (CEOAs): the Yangtze River Delta Economic Open Area (YRDEOA), Southern Fujian Economic Open Area (SFEOA), and Guangdong's Pearl River Delta Economic Open Area (PRDEOA). Again, preferential policies on taxation, exports and imports and the like were offered. In this case, energy, transportation and technology-intensive projects and productive projects were offered special incentives.

The open policy gathered further momentum in late 1987, when the Chinese Government decided to expand the coastal open areas into an area embracing virtually the whole east coastal area of China, extending from

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1. Productive DFI includes investment in industry, transport, agriculture, forestry, animal husbandry and the like.
Liaoning Peninsula in the Northeast to the Guangxi Autonomous District in the Southwest.

Finally in May, 1988, Hainan Island obtained the status of a province and became the fifth but the largest SEZ in China, although the financial commitment of the central government is believed not to be as substantial as to the other SEZs.

By the end of 1987, China's CEOAs included 288 cities and counties. They covered a total area of 320,000 square kilometres (3 per cent of the national territory) along a 18,000 km coastline with a population of 160 million (14.5 per cent of the national population).1

The details of the treatment accorded to these different regions are numerous and sometime confusing. A survey of major difference in tax treatments can be found in John Thoburn et al. 2 The overall feature is that the difference of treatment between the coastal regions has become smaller over the years. The fundamental feature however remains: the open policy is applicable only to part of the country, i.e., the coastal east. It is also evident, from the above account, that Guangdong has played a key role in the Chinese government's strategy of encouraging DFI.

During and after the political turmoil in June of 1989, the commitment of the Chinese government towards the policy of encouraging DFI faced a major test. It was widely feared that the policy might be reversed. In the face of this, the Chinese government made its latest move of the regional strategy, that is, to establish the Pudong Development Zone in Shanghai in April of 1990. The Zone is not only promised the same treatment of SEZs but also some new incentives. The latter includes:

1). Foreign investors are allowed to engage in entrepot trade and other service business;

2). Foreign-funded banks are allowed and offered special incentives.3

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3. According to a speech by Shanghai's mayor, Zhu Rong-ji, see Hong Kong. ER, No. 2174, 18 June, 1990, pp. 3-4.
It seems that the government's intention is to develop this Zone into a financial and service centre for the surrounding Yangtze River Delta or even beyond, where a substantial amount of DFI is already in place and the potential for further inflows is still great. It is also evident that there is a shift in regional emphasis from the Southern provinces Guangdong and Fujian to the old industrial centres in the East and Northeast.

5.2.2. Industrial Strategy

China did not have a public general industrial policy in the 1980s until March 1989. This encouraged investment in agriculture, energy industry, transport and communication, and basic material industries. Inevitably, China's industrial strategy to DFI appeared erratic, taking the form of a series of check-lists, issued by the State about the priority and demarcated areas for DFI from time to time.

In the earlier years, that is, before the promulgation of the Implementation Provisions of the Law on Joint Ventures in November 1983, industrial strategy was largely absent. The only trace of such a strategy then was that in the joint venture law, it was stipulated that joint ventures using 'world-wide advanced technology' could apply for tax reduction or exemption for the first 2-3 years.

In the Implementation Provisions of the Law, issued in 1983, however, the areas where EJVs would be allowed were specified as follows: energy exploitation, basic material industries, manufacturing, agriculture, animal husbandry, fishery, tourism and services. Any proposed EJV was required to meet at least one of the following four conditions:

1), use advanced technology and scientific management methods, with the capacity to increase product varieties, improve product quality and output and reduce energy and material consumption;

2), be conducive to technical renovation of existing enterprises and achieve economic efficiency;

3), be able to expand product exports and increase the earning of foreign exchange;

4), be able to provide training for Chinese technical and managerial personnel.

This is apparently a big step forward from the ambiguity of the Law. But like the series of check-lists, the Implementation Provisions do not attach any fiscal incentives to the identified priority investment areas. Their main significance is to provide a guide-line for the government department in exercising its examination and approval power: projects that do not meet the current criteria should be rejected.

In November 1984, however, the Provisional Regulations on Reduction and Exemption of Enterprises Income Tax and Consolidated Industrial and Commercial Tax for Special Economic Zones and the Fourteen Coastal Port Cities was promulgated. This offered distinctive tax incentives to productive (as define earlier, cf. p.100.) DFI.¹

The most important move in the implementation of the industrial strategy came in October 1986, when the Provisions on the Encouragement of Foreign Investment were promulgated. The Provisions singled out two categories of FIEs, that is, export-oriented ones and technologically-advanced ones (referred as the "Two-type FIEs"), and offered special incentive packages to them, including lower corporate taxation rates, prolonged tax holidays, exemption from paying part of the the state subsidies that their employees receive, lower site fees, priority supplies of water, electricity, transport and communication facilities and priority access to bank loans.

Rules for defining these two categories of FIEs were announced shortly afterwards. An export-oriented FIE was one 1). whose products are mainly destined for export (usually 70 per cent of the output value) and 2). enjoys a foreign exchange balance (or surplus) after deducting from its foreign exchange revenue, foreign exchange expenditure and foreign currency remitted abroad.

A technologically-advanced FIE refers to one in which the foreign investor provides advanced technologies for the development of new products, product upgrading and renewal in order to increase exports or substitute for imports.1

In order to further encourage technologically-advanced FIE, the State Planning Commission promulgated additional Rules in October of 1987. These stipulated that approved import-substitute products could be sold partly or entirely in the domestic market for foreign currency, and that, under similar conditions, domestic buyers must give priority to these import-substitute products over imports.2

In the general industrial policy published in March 1989, it is required that an industrial policy for DFI be drawn up shortly. There is no sign of such a plan yet. The latest move is that a general FAI adjustment tax has been introduced, coming into effect from the 1st of January in 1991. This lays down five different tax rates from zero to 30 per cent.3 It is not clear whether it applies to FI.

5.2.3. Increasing Flexibility towards Investment Forms

An important measure that the Chinese government took in encouraging DFI was an increasingly liberal attitude towards the forms that DFI should take. The foundation was laid in the first foreign investment law (the Law of on Joint Ventures Using Chinese and Foreign Investment). No

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3. Hong Kong, *ER*, No. 2199, 10 December, 1990, p. 10
restriction was imposed on the maximum share of foreign investor's equity. On the contrary, there was a restriction on the minimum share of foreign equity, that is, 25 per cent. But in the early years, WFOEs were largely confined to the four SEZs. Moreover, applications for WFOEs could be handled only by the MOFERT. As a result, the number of WFOEs established before 1988 is limited, totalling some 500 by the end of 1987.

The Law on Wholly Foreign-owned Enterprises was promulgated in March of 1986, which signified significant improvement in the government's attitude towards WFOEs. Another positive move was made in 1988, when the government delegated some of its power to examine and approve WFOEs to local governments (see Chapter 10).

Paradoxically, the austerity programme, starting from the later 1988 seems to have provided a timely impetus for the Chinese government to encourage more WFOEs, since the economic contraction severely limited the ability of local partners to raise financial resources to join foreign investors in establishing joint ventures. But the liberal attitude towards WFOEs is indeed fundamental rather than temporary: the MOFERT in Beijing was reportedly acknowledging a wide range of benefits that WFOEs could bring to China (ibid.). It is generally believed in China that WFOEs are associated with more advanced technology, although how to adopt such technology in Chinese enterprises, without participation in the operation, is a matter of widespread concern.

The Chinese government's liberal attitude towards forms of DFI is also reflected in its adoption of the CJV. Interview with an official from MOFERT in Beijing suggests that this investment form was initially a local creation from Guangdong province, and later adopted by the central government.

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1. MOFERT is the abbreviation of the Ministry of the Foreign Economic Relationship and Trade.
5.2.4. Special Encouragement of DFI from Overseas Chinese

The Chinese government has also tried to create a delicate special incentive to overseas Chinese over the other investors. This is partly because one of the most important objectives of the open policy in the beginning was to build prosperity in areas close to Hong Kong, Macau and Taiwan and through this to promote the cause of national unification (see 4.2.). In this context, investment from these areas is particularly desirable, but no provisions was made to provide special incentives to them.

Later on, however, the government realized that the economic ties through DFI (and other forms) between Southern mainland provinces and these three territories are perhaps a even more powerful tool to enhance the national unification cause. It therefore became conscious in providing special incentives to Chinese investors from these three areas. In April 1985, the government issued the Provisional Regulations on the Encouragement of Overseas Chinese Investment.¹ But interestingly, although Hong Kong rather than Taiwan was the main investment source, in July 1988, special provisions were passed to encourage investment from Taiwan.² It was not until August 1990 that the general Provisions on the Encouragement of Investment from Hong Kong, Macau and Other Overseas Chinese,³ which extend in some aspects the previous provisions (ie., the first one.), was announced.

The most conspicuous special incentives offered to overseas Chinese is in terms of tax. FIEs by overseas Chinese investors, located outside the SEZs and ETDZs in the 14 open cities, are exempt from income tax for the first three profit-making years and pay tax at half the normal rate in the following four years. Moreover, after these seven years, these FIEs pay tax at a 20 per cent reduced taxation rate. In comparison, FIEs by other investors, are exempt from corporate income tax for only one year, and can enjoy half tax reduction in the following two years only.⁴ It is also

¹. Xiang Kong-yan & Yu Zhi-qing, op. cit., pp. 51-52.
stipulated that land use fees, charged on FIEs by overseas Chinese investors, should be 10-30 per cent less than normal.

Moreover, the Taiwan Provisions offer more special treatment to Taiwanese investors: first, they are allowed and encouraged to engage in exclusive land development in some separately designated coastal areas (including mainland and island); second, they are allowed to purchase shares and stocks of existing Chinese enterprises, and freehold of real estate properties. The Hong Kong - Macau Provisions grant similar treatment to other overseas Chinese investors.

The provisions even attempt to cater to the special needs of overseas Chinese investors whose business style is characterized by close family ties. For instance, it is stipulated that overseas Chinese investors can trust their mainland relatives as representatives. A special clause is also included to allow for transfer and inheritance.

The Chinese government seems not to want to stress the special treatment for overseas Chinese investors for fear that it might cause unnecessary disincentive to other foreign investors. For instance, during an interview with reporters, the Head of the State Tax Bureau denied that overseas Chinese investors enjoy more tax concessions than other investors by referring to the so-called 'basic principle of equal taxation obligation'.

5.2.5. Decentralization

Finally, the policy measure has another important dimension: to create space for local governments to take initiatives. This dimension is however not peculiar to the DFI policy, rather it is partly the consequence of the economic reforms. It can be argued however that the attempt of the central government to implement the open policy, mainly the DFI policy, by offering a special package to Guangdong and Fujian, initiate the process of decentralization, since many elements of this package were later extended to other provinces as provinces press for similar treatments.

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1. This right has only recently become available to other investors.
Local governments can exert influences in the following fields related with DFI:

1). **approval power**: Since early 1980s, the central government has delegated an increasingly greater approval power to various levels of local governments. In turn, some local governments have put great deal of effort to simplify the application procedures. On the other hand, however, the eagerness of local government officials to attract DFI makes strict control of certain potentially undesirable projects less possible.

2). **reduction or exemption of local income surtax**: According to the Income Tax Law Concerning Equity Joint Ventures With Chinese and Foreign investment, a local surtax of 10 percent of the assessed income tax should be levied on EJVs (also applies to other FIEs). Local governments, however, are given the authority to grant a reduction or exemption. It is apparent by now that most local governments offer the reduction or exemption of the local surtax as an investment incentive. In some cases such as SEZs, local governments also have discretion over the reduction or exemption of the Consolidated Industrial and Commercial Tax on FIEs' sale by FIEs in the local market.

3). **land use fees and public utility costs**: Land use fees are decided by the local governments, based on its use, geographical position, environment and infrastructure conditions. Industrial joint ventures established in big cities such as Beijing, Shanghai pay annual land fees of about 15 yuan per square meter. The land use fees vary greatly from place to place. Charge rates on public utilities are also determined by local governments.

4). **wage rates**: The total wage that FIEs have to pay to an employee can be divided into three categories: basic wage, bonus and subsidies. According to the relevant law of late 1986, wages in all FIEs must not be lower than 20 percent above the "average wages" of workers in Chinese state enterprises in the same localities and line of business. The term "average wage" is, however, not defined. So localities have to formulate their own

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definitions as part of legislation to encourage foreign investment in their areas.¹

Comparatively speaking, the FIEs retain greater autonomy over bonus payments. According to the 1980 joint ventures labour management regulations, the joint venture’s board of directors determine the bonus and establishes a bonus and welfare fund out of after-tax profits.

Local legislation, nonetheless, has significant power in influencing other items such as subsidises, labour insurance and welfare, and pension payments. Subsidies fall into two groups: these directly paid to the worker and those indirectly paid to the local government or kept by the trade union of the enterprise. The first includes money for such items as rent, transportation, sanitation, heating, and food allowances, in total approximately 15 per cent of the average monthly wage. The indirect subsidy covers part of the cost of goods and services, including food and housing, and the like. Only the export-oriented and technologically-advanced FIEs are by law exempted from payment other than labour insurance, welfare and housing subsidises.

5) local governments can also provide other various reforms, such as curbing general ‘red-tape’, or providing supportive services such as special material supply, improving infrastructure, etc.

5.3. Problems of the Policy and the Implementation Measures.

The problems of the policy can be analyzed in two layers: one is operational, derived from faults in planning; the other is strategic, rooted in ideological and theoretical dilemmas.

From the point of view of planning, the greatest problem lies in the fact that the policy has too many goals. As shown earlier, the policy includes such diversified objectives as expanding China’s capital formation, technology transfer, export promotion, to national unification and consolidation of the CCP’s power and authority in China. The problem is, as we will see later that not all the goals are consistent with each other.

Furthermore, from the point of view of evaluation, the more goals there are, the less clear-cut the criteria is in judging the performance of the policy. In fact, it has happened that this or that political or economic argument is used to legitimize the failure of some other aspects in the implementation of the policy.

The major strategic problem concerns the relationship between the industrial and regional strategies, and between them and China’s overall ownership strategy. It should be stressed that the Chinese government has not been very clear about how DFI relates to China’s ultimate socialist aim, i.e., complete public ownership in the economy. Indeed, there has been considerable confusion and uncertainty about this question among the officials and academic researchers.

According to Lenin, to whose writings during the New Economic Policy period most Chinese writers have turned for ideological support, the role of DFI is transitory. It is allowed only to help develop productive forces in the primary stage of socialism where these have not been sufficiently developed to allow full public ownership. Based on this point of view, Chinese writers have tended to agree with Lenin that the necessity of DFI’s presence in China is not permanent, although they carefully stressed that this transitory period may be very extended.

What follows from the transitory nature of DFI is that it is not limitless. Indeed, at a certain point, such a limit was defined. An important document in 1985 by The State Economic System Reform Commission, *Considerations of the Economic System Reform during the Seventh Five-year Plan Period*, reads:

"While abiding by the domination of public ownership over the economy, we should continue to develop multiple economic forms and various management methods. By the end of the seventh five-year plan period (i.e., 1990, ZL-Y), in gross industrial output value, the public sector is to account for about 60 per cent, the collective sector 30 per cent or so, individual and others about 5 per cent but not more than 10 per cent.”

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It seems that the Chinese government intends to safeguard this principle, although the weight of collective sector has already surpassed the target.¹ For instance, although many state-owned enterprises make heavy losses and it has been suggested for a long time that DFI should be allowed to take them over and make an improvement in them, the Chinese government has still not allowed this to happen in large- and intermediate-sized state-owned enterprises. On the other hand, DFI in some vital branches of the economy such as energy industry, transport and communication, and the like, is, according to my interviews with local officials in Guangdong, actually restricted due to the government’s aversion of foreign control in these branch of the economy. But these are exactly the fields where the industrial strategy encourages DFI.

The contradiction between the industrial and regional strategy is also evident: although since 1983 the energy industry and raw material industries have been earmarked as among the priority investment areas, they have received a limited amount of DFI, because the regional strategy favours the coastal areas where there are few such industries. On the other hand, the light processing industries in the coastal areas have attracted massive inflow of DFI. As a consequence, there is a growing imbalance between the underdevelopment of raw materials and energy industries and the manufacturing industries. This relates directly to the very heart of the greatest problem of Chinese economy, i.e., the irrational resource allocation and distorted prices system.

Strangely enough, being eager to claim success on both of its policy fronts, that is, open policy and economic reform, the Chinese government seems not to notice these contradictions. Instead, it has attempted to make Guangdong and Fujian, particularly the four SEZs, an experimental ground for both economic reform and open policies, although these two provinces were neither technologically nor economically strong.

¹ A conversation with an official from the State Economic System Reform Commission in early 1991 indicates that the above document was actually made at the time when policy towards ownership reform within the Commission was relatively more liberal than today.
The question is: can a local economy with a considerable presence of DFI, like Guangdong and Fujian, provide useful opportunities for China's economic reform?

It will be remembered from chapter 1 that the ultimate aim of the reform was to make Chinese enterprises independent (of the government) and, more importantly, efficient. How do FIEs help Chinese enterprises become more independent and efficient? Given the nature of DFI and the existing liberal legislation towards FIEs, taking-over Chinese existing enterprises with DFI will perhaps help. But as shown earlier, this is thought to be ideologically undesirable.

As many economists believe, the key to making enterprises efficient lies in the functioning of a competitive market, including competitive prices and a unified market. Can DFI help to establish competitive prices and a unified market? The answer is probably no. This is because the problem of the Chinese market structure, including its abnormal prices, can not be remedied by market forces. Under the current conditions, the more a product is in short supply, the lower price it can get and therefore the more producers lose, since the government exercises price control on those products in an attempt to prevent widespread price increases. As a rule, these products are raw materials such as grain, steel, cotton, tobacco, and infrastructure service such as transport and communication, etc.

Needless to say, the situation can be improved by increasing production and thus supplies through DFI. But under the central government's regional policy, the areas where raw material industries are located, that is, the inland areas, receive less centrally-funded investment (see Chapter 8 for details). In the meantime, because of lack of investment incentives and the poor profitability, DFI is unlikely to invest in these areas either. Guided by profit maximization, DFI will concentrate in the manufacture of consumer goods that fetch good prices in the market without the burden of price control. In doing so, they actually add more shortages to domestic raw material supply, and cause even more severe market distortion.

Thus the central government's expectation that the coastal open areas will play a pioneering role not only in the open policy but also economic reform is questionable.
The regional strategy also has political problems. One of the most fundamental changes in the principles underlying China's development strategy since 1979 is its abandonment of egalitarianism, which prevailed since later 1950s. It is official policy that some individuals should be encouraged to become rich earlier than others. This has been described as "taking the lead to become rich". The same policy also applies to regional units.

It can be inferred that, under this policy, there is likely to be a widening gap in gains from economic growth between individuals and regions. Furthermore, as administration decentralization greatly increased the role of local governments in economic affairs, the implementation of such a policy and the resultant widening gaps are likely to cause excessive competitive efforts by regional governments to expand their economic power. Indeed, it has led to regional rivalry and undermined the authority of the central government. The regional strategy, which is designed to implement the open policy, is thus in long-term divisive and politically harmful.

5.4. Conclusion

This chapter shows that the goals of the Chinese government's DFI policy are not as simple as thought to be by various writers: while its overall economic goal is to promote economic growth in China through DFI's contribution to the following four fields: expansion of capital formation, transfer of technology (including managerial skills), growth of exports, improvement of productivity and efficiency, its overriding goal is political, first to enhance its political legitimacy and authority at home and abroad, second to promote national unification with Hong Kong, Taiwan and Macau.

The policy also has certain less important goals such as increasing earning of foreign exchange, and creation of employment, or less defined goals such as enhancing China's economic reform.

It is argued that, because of the multiple-facet goals, the policy on the one hand cause conflicts and inconsistency in implementation measures; and on
the on the other, makes evaluation difficult. The policy also suffers from various ideological, strategic and operational problems. From an ideological point of view, the policy makers are not sure about the relationship between DFI and China's socialist aims, and tend to take a liberal or conservative attitude according to changes in political climate. This leads to a situation where China's desire to attract more DFI in certain areas for economic purposes has to be compromised by its need to maintain the state's control over the economy through state ownership. In reality, this made the absorption of foreign capital in the state-owned sector, and in some vital industries such as energy and raw materials industries a difficult arena.

From a strategic point of view, with the aid of the decentralization of administration, the region-biased policy tends to overshadow the implementation of the industrial policy. It may create regional disparity, and more importantly, fuel political rivalry between regional governments, which poses a direct threat to the political authority of the central government, the very ultimate aim of the DFI policy.

What has happened in reality? To what extent have the policy goals been achieved, and at what cost? What other effects, both positive and negative, have resulted from, but were not intended by, the policy? These are the two principle questions that the following chapters attempt to answer.
In previous chapters, we have examined the policy goals, various characteristics of DFI in China and the received assessment of the policy. With the available information, what can be said about the effectiveness of the policy is very limited, except the following: first, the inflow of DFI has been substantial in international perspective, although the composition of FI has not been very desirable with a great share of foreign loans; second, industrial distribution of DFI (or FI as whole) has not increased the share of industry significantly in the Chinese economy, although the situation in Guangdong is different; and third, the policy has been effective in concentrating DFI in Southern China, particularly in Guangdong, but the costs and benefits of such a concentration are unknown.

Compared to the numerous policy goals as revealed in the last chapter, what is known is far too limited to say whether the policy has been a success or a failure. What is needed is therefore a systematic investigation of the policy goals and the empirical evidence. Needless to say, under the present circumstances, this makes this study primarily a fact-finding mission.

In order to conduct this investigation, some information, which is not available in official statistics, needed to be collected. This included: first, how the operations of the FIEs in China are conducted and to what extent they meet the policy objectives? second, what are the costs involved in inducing DFI and in implementing the policy?

How can this information be gathered? Since we have exhausted the official statistics and the received studies, the only other sources left are: first, unpublished official data; second, sample survey of relevant FIEs and localities. In fact, efforts were made in the field work to cover both of these sources (described later).

Due to limitation of time and resource, this thesis has to confine its search for empirical evidence within a limited area, that is, Guangdong province. This choice is based on the fact that Guangdong has absorbed at least one-third of DFI in China, and that this province was chosen by the central government to play a leading role in its DFI policy.

Situated in the southern coast of China and neighbouring to Hong Kong and Macau, Guangdong is one of the twenty-nine provincial constituent units in mainland China. In 1988, it had a population of over 59 millions (5.4 per cent of the national total) and an area of 180,000 square kilometres (1.9 per cent of China’s total). Its share of national income was 7.8 per cent in the same year.

It has a long-standing tradition of foreign trade and foreign connections. Before the signing of the Nanking Treaty, which opened five Chinese ports to foreigners, in 1842, Canton (now called Guangzhou), the capital city of the province, was the only Chinese port authorized to deal with foreign trade. By the eve of the foundation of new China, however, Guangzhou’s importance in China’s foreign trade had lessened due to the rising of two other Chinese ports in the North and in the East, i.e., Tianjin and Shanghai. It accounted for about 20 per cent of China’s total foreign trade volume in 1948.

After the liberation, Guangdong’s fortunes continued to decline. This is because the CCP, under the leadership of Chairman Mao, attached great importance to industrial development in inland areas rather than coastal areas, out of consideration of defence, and Guangdong was especially disadvantaged by being close to Hong Kong, Macau and Taiwan. In 1978, Guangdong’s per capita national income was only 311 yuan, below the national level of 315 yuan.

Nonetheless, due to its closeness to Hong Kong and Macau, the province was the economy that had the highest degree of export propensity in the country: in 1978, its export procurement value accounted for 9.4 per cent of its total gross industrial and agricultural output, while the national average was only 2.9 per cent.

After the adoption of the open policy in late 1978, however, Guangdong’s geographical proximity to these three areas worked to its advantage and made it the frontier in the open policy and later, in economic reform. In fact, as shown in the last chapter, the central government designated it to
play a leading role in the open policy and granted a series of special concessions to it.

Consequently, by the end of 1987, Guangdong had received over 58 per cent of the total DFI that China had absorbed (see table 4.4). Although Guangdong's share in the number of new DFI contracts has lessened in more recent years (46.1 per cent in 1988), as a whole, it still accounts for about half of all the DFI in China.

The fact is that Guangdong's national income grew 12.2 per cent annually during 1979 to 1988, more than double the rate during 1950 to 1978. Subsequently, Guangdong has been often cited in official documents as testimony to the success of the Chinese government's open policy, particularly its policy of encouraging DFI in manufacturing. Guangdong's success has equally been admired abroad and has attracted the fascination of some of the most experienced minds:

"... Guangdong is the fastest growing and most envied region in the country. ... the province has been a fascinating laboratory for the transformation of a static socialist economy and social system. Reforms instituted a decade ago by Deng Xiaoping have allowed this area to look outward once again and to move 'one step ahead' of the rest of China and the socialist world in introducing new political and economic policies." 

Since this province has the greatest concentration of FIEs, it provides us with a convenient place to observe the operations of FIEs in China. It must be said however that what is observed in Guangdong is not necessarily true or representative of all FIEs in China.

6.2. Surveys and General Findings

Between Oct. 1989 and May 1990, field work was conducted in Guangdong and Hong Kong. The work mainly consisted of three surveys: an investors survey in Hong Kong, a FIEs survey in Guangdong, and interviews with

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2. See the front flap of Ezra F. Vogel, 1989.
dozens of officials at different government levels and localities. This section aims to describe the details of the surveys and their general findings.

6.2.1. Investors Survey

The investors sample in Hong Kong was drawn from a name list of 483 companies which had made manufacturing DFI in Guangdong according to China's Almanac of External Economic Relationships and Foreign Trade (CAEERFT). It including 424 HK based and 59 non-HK based companies. Two different ways were adopted to obtain their telephone numbers and addresses. For HK based companies, the telephone book was used to find out their telephone numbers. The result was a disappointment: only 117 of the 483 companies were listed. Phone calls were made to these 117 companies to obtain mailing addresses on the one hand, and request for interviews on the other. Only ten companies granted interviews instantly and some twenty agreed to fill in the questionnaire, although addresses of over seventy companies were obtained. The questionnaire was mailed to these seventy HK-based companies, along with self-addressed stamped envelopes and a copy of an introductory letter from the Director of the Centre of Asian Studies of Hong Kong University, Professor Edward Chen.

In the next few weeks the interviews were carried out, phone calls made to urge the companies which had received the questionnaire, to complete it. Respondents were thanked and asked for interviews if it had not been previously agreed. Another ten or so interviews were granted in this way. 18 valid replies were received and 20 interviews with investing companies' executives completed. The majority of the replies overlapped with the interviews, although in two or three cases, there was either only a reply or interview.

For these companies not based in HK, the addresses and phone numbers of their HK branches or Guangdong factories were obtained by making contact with the major consulates and trade commissions from different countries in HK, such as the U.S. Consulate, French Trade Commission, Australian Trade Commission, Singapore Trade Commission, British Trade Commission, etc. There were asked for their help in contacting some of the companies from their countries and asked for information on
the role these organizations played in the DFI inflow in Guangdong from their countries. The efforts resulted in an interview with the head of the HK branch of a French company having investment in Guangzhou, and one subsequent interview with the foreign manager of a Sino-American EJV, which took place in Guangdong.

Investor questionnaires were also used later in Guangdong whenever a foreign manager was available in the FIEs, although meeting with foreign executives was not the main concern at that phase. In sum, the investor questionnaire had 22 valid replies, including 19 from HK based companies and 3 from non-HK based companies. Almost all of them were interviewed, in addition to some others. Incidentally, the share of HK based and non-HK based investing firms in the survey was in line with the reality.

Among the HK based investing firms, 14 were independent companies (including one company which is a subsidiary of a Guangdong entity, based in Hong Kong), 7 subsidiaries of other companies, one a joint venture between a mainland Chinese entity based in HK and a HK company.

The three non-HK based companies (No. 2, 19, and 22) were from France, Belgium and U. S. A., respectively. They were either subsidiaries of, or themselves multinational enterprises, owning 81, 40 and over 300 overseas factories respectively. One was a holding company, while the other two were manufacturers.

The 19 HK-based companies had an average employment of 101 employees\(^1\), of which 9 companies had no production facilities in Hong Kong, and the other 10 companies had an average size of 120 production workers. Five companies owned factories in other countries. Totally, these 19 companies owned or partly owned (at least 25 per cent) more than 38 factories outside Hong Kong, of which 33 were located in China, and 28 were situated in Guangdong.

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\(^1\) This is much smaller than the companies included in Prof. Chen's sample, in which the main size group was of 500-2000 persons. It is however much closer to the average size of manufacturing companies in Hong Kong.
The three non-HK based companies had five DFI operations in China, of which four were in Guangdong. One of the companies had two DFI projects in Guangdong, located in two different cities.

The net profit contribution of overseas factories to the investing companies was indicated by only 11 companies, which shows that the ratio was 44.38 per cent on average. This evidence indicates that the overseas operation was significant for these investing companies.

The surveyed companies dealt with the following products: printed label, food, electric watches, fire extinguishers, atomizers, textiles, watches and parts, enamelware, woven labels, telecommunication products, ABS luggage, cotton clothes, electronic products, cassettes, plastics moulds, watch parts, batteries, shoulder pads, underwear, building materials, jewellery, tin cans, cigarettes, food and beverages.

Among the 19 HK-based companies, 16 had owners or executives originated from Guangdong province. There were only three cases, however, in which the companies invested in the counties where their owners or executives actually originated. The three non-HK based companies had no ethnic connections with Guangdong. These findings indicate that ethnical connections had no direct impact on the specific locations of DFI, although the overall connection is evident. In another words, it seems not to be the case that the place where more overseas Chinese originated would receive more DFI.

In sum, the 22 companies had investment in 33 FIEs in Guangdong, including 29 EJVs, 2 CJVs and 2 WFOs. It should be stressed here that this proportion does not reflect the distribution of manufacturing DFI in Guangdong among different investment forms. Rather it is merely the result of the fact that this list of investors is drawn on the EJVs name list, which unfortunately is the only one available.

These FIEs are mainly located in Shenzhen SEZ(8), Guangzhou(6), Dongguan city (3), Zhuhai SEZ(2), Panyu county(2), and so on.
6.2.2. FIEs Survey

In the foreign investors' survey, the factors that influenced the decision-making on DFI in Guangdong from the point of view of the investors were explored. But DFI in China has not been just the business concern of foreign investors; rather it is in partnership with local entities. So the motivation of the Chinese partners and the factors influencing their participation in the partnership must also be taken into account to understand the determinants of DFI in China.

But most importantly, the FIEs survey aims to investigate the operational characteristics of FIEs in Guangdong. As discussed earlier, this information is essential to assess the impact of DFI on the host economy and the evaluation of the effectiveness of the policy.

The FIEs questionnaire was developed in Hong Kong and then executed in one and half months in Guangdong. This later phase involved extensive travel round the vast territory of Guangdong. The working environment in Guangdong was very different from that in Hong Kong. Except the FIEs situated in Guangzhou, it was impossible to contact by telephone and ask for interviews beforehand, since they were so far away from Guangzhou and it was not easy to make such arrangement on long distance phone calls.

The Professors in the Institute of Hong Kong and Macau Studies in Zhongshan University, where this study was undertaken, were asked to make telephone calls to people in local governments with whom they were familiar beforehand; or equipped with both an official introduction letter from the University and a personal introduction letter from one of the professors, direct approaches to local officials were initiated; sometimes, one of the professors accompanied the interviewer to these localities, which proved to be very helpful. Arriving at the locality, the local branch of MOFERT was contacted and asked to introduce the interviewer to some of the FIEs. In Guangzhou, method used in Hong Kong was repeated to see executives in 6 FIEs.

In sum, 26 factories were visited in Guangdong, including 25 manufacturing units and one power generation plant, in some ten localities. These localities were mainly in the Pearl River Delta, the location of the
main concentration of DFI. They are: Guangzhou city(6), Shenzhen SEZ(2), Zhuhai SEZ (4), Dongguan city (2), Huizhou city (2), Foshan city (1), Shunde county (1), Beijou township (1), Zhongshan city (2), Baoan county (2), Panyu (2) and Kaiping county (1).

The conditions surrounding the documentation and the administration of the FIES in China is such that a random sample across a wide territory is impossible. The present sample is not a random one, and indeed it could not be based on any pre-set sampling framework, although attempts at sampling were made before hand. It proved impossible to carry out and therefore abandoned.

As indicated before, the enterprises were selected after the interviewer had arrived in the locality, and with the assistance of local officials. Usually, these officials were asked that the enterprises should not always be model-type (that is to say, large scale in investment, economically efficient and technically advanced, and so on) but diversified in terms of business scope, performance as well as scale, in full operation, and should not be far away from each other, since there was no means of transport available and time was limited.

As a result, the sample has a wide coverage and is in line with the general industrial structure of the DFI. It also covers three kinds of policy-related FIEs, ie. technologically-advanced (TA) FIEs, export-oriented (EO) FIEs and FIEs whose products are officially recognized as import substitutes (IS). 1 The major features of the 26 FIEs are sketched in table 6.1.

There are a number of biases in the sample: first, as shown in the table, the sample includes 20 EJVs and 6 CJVs, no WFOEs. This does not reflect the overall distribution, since there are almost as many manufacturing CJVs as EJVs in Guangdong, although the number of WFOs is disproportionately small.

Secondly, the geographical distribution of the sample is not representative. FIEs in Guangzhou municipality are over-represented: they account for

---

1. There are specified application procedure to follow and conditions to meet for an FIE to acquire one or more than one of such status.
some one-seventh of the total in reality but three-tenth of these surveyed. On the other hand, FIEs from the SEZs are under-represented, but to a lesser extent. This might have some effects on the employment data, since the majority of the employees in the SEZs are from outside Guangdong. But as far as other aspects—particularly technology transfer, production and marketing—are concerned, no significant difference has been found.

Thirdly, the sample over-represents technologically-advanced FIEs: they are less than 5 per cent in reality, while they account for 15 per cent in the sample. The difference seems to be small in relation to the size of the sample, and therefore should not have significant effect on the sample results.

The enterprises with import-substituting products are also over-represented, although there are only two of them in the sample. This however is not going to have serious effects on the overall pattern of marketing, since one of the enterprises has subsequently become export-oriented.

Fourthly and finally, the performance of the FIEs in the sample seem to be better than average and this may explain why they agreed to be interviewed. The evidence is that, while the average size of the DFI per FIE of the sample is close to the average level, the average size of the revenue or total output in the former seems to be higher than average (see Chapter 9 for details).

The 26 surveyed FIEs involved foreign investors from HK (16 as sole foreign investor, and 4 in partnership with other foreign investors), U.S.A (2 as sole foreign investor, and 1 in partnership with HK investor), Australia (2 as sole foreign investor), Japan (2 in partnership with HK company), Belgium (1 as sole foreign investor), Taiwan (1 in partnership with HK company). Since there is no WFOs in the sample, all these FIEs had one or more than one Chinese partners.

It is interesting to note that, in all the cases where there is more than one foreign partner, there was always one partner from HK. It is perhaps an indication that the advantages of HK companies in dealing with DFI in Guangdong are appreciated by other foreign investors.
<table>
<thead>
<tr>
<th>No.</th>
<th>Status</th>
<th>Main product</th>
<th>Special feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EJV</td>
<td>Building materials</td>
<td>TA</td>
</tr>
<tr>
<td>2</td>
<td>EJV</td>
<td>Food</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>EJV</td>
<td>stainless steel pipes</td>
<td>IS&amp;EO</td>
</tr>
<tr>
<td>4</td>
<td>EJV</td>
<td>steel grating</td>
<td>TA&amp;EO</td>
</tr>
<tr>
<td>5</td>
<td>EJV</td>
<td>electrical contacts</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>EJV</td>
<td>electronic circuits</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>EJV</td>
<td>electronic circuits</td>
<td>TA</td>
</tr>
<tr>
<td>8</td>
<td>EJV</td>
<td>machinery tools</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>CJV</td>
<td>electricity power</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>CJV</td>
<td>electrical fan</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>EJV</td>
<td>telephones</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>EJV</td>
<td>automobile video parts</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>CJV</td>
<td>building materials</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>EJV</td>
<td>woven belts</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>CJV</td>
<td>glasses</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>CJV</td>
<td>cassettes</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>EJV</td>
<td>plastic toys</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>CJV</td>
<td>jewellery parts</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>EJV</td>
<td>food materials</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>EJV</td>
<td>computerised toys</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>EJV</td>
<td>textiles</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>EJV</td>
<td>wool products</td>
<td>EO</td>
</tr>
<tr>
<td>23</td>
<td>EJV</td>
<td>silk clothes</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>EJV</td>
<td>blueprint paper</td>
<td>TA</td>
</tr>
<tr>
<td>25</td>
<td>EJV</td>
<td>knitwear</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>EJV</td>
<td>packaging material</td>
<td>IS</td>
</tr>
</tbody>
</table>

In three cases, mainland entities which were based in HK were entered as foreign investors from HK. In two cases, such entities acted as the sole foreign investors in the ordinary sense, which is unusual. Mainland entities based outside China are usually not allowed to be the sole foreign investor in a Chinese FIE, because it might use this as a means to escape higher
domestic taxation. One case occurred when the mainland entity took over as foreign investor from a HK investor in an FIE that was in a dispute between the Chinese and foreign partners; another was the power generation plant in which a local entity based in HK, which is under the direct jurisdiction of the local government, acted as the sole foreign investor. The manager from the plant said that it was difficult to find a real foreign investor to invest in such project which was supposed to be slow to yield returns (although it turned out not to be so.). He however also indicated that for some time, DFI in industries such as energy were restricted.

6.2.3. Interviewing Local Government Officials.

Evidence from the investors and FIEs survey suggest that local governments play an important role in attracting DFI and enhancing the operation of FIEs in Guangdong. Moreover, it was part of the central government's strategy to allow the local governments in Guangdong to have power to attract DFI, as shown in the last chapter.

The key questions asked during interviews with government officials concerned, first, what efforts the local government made to improve the investment environment and attract more DFI; second, how significant the DFI and related production (particularly, manufacturing production) was in the local economy. Much determination, persistence and creativity were displayed by the local officials relating to DFI, and DFI had become very significant in some regions of the province. On the other hand, however, there were also signs of negative effects.

6.3. Conclusion

For various reasons, Guangdong was chosen by the central government to play a leading role in the policy of encouraging DFI. Indeed Guangdong seems to have been very successful in doing so: it not only attracted half the DFI in China, but by late 1980s had become the fastest growing economy in the country. As a matter of fact, in the writing of Ezra F.Vogel's, Guangdong seems to have been a victim of its own success, as other provinces, in jealousy, blocked or charged high prices for supplies to Guangdong.
How has Guangong’s economy developed? To what extent does Guangdong’s success serve the policy objectives of the Chinese government? What can be learnt from Guangdong’s experience about the general features of DFI in China, and indeed the effectiveness of the policy? These are the questions that we will attempt to answer in the next five chapters. First of all, the next chapter presents evidence at the micro-economic level, to see to what extent the characteristics of individual FIEs are matched to policy objectives.
As discussed in Chapter 5, the principal stated economic objectives of the policy is to achieve economic growth through DFI's contribution to China's capital formation, advancement of technology, increase in exports, and improvement in productivity and efficiency. Based on the materials collected from the surveys (mainly the FIEs survey) and other information, this chapter will examine to what extent these objectives have been realized in the FIEs in Guangdong. It will also look at some of the costs involved. A table is included in Appendix 7 to show various aspects of these surveyed enterprises.

7.1. Inflow of Capital

The policy's first economic goal is to bring in foreign capital. A relevant question is what factors influence most significantly the inflow of foreign capital through DFI, and whether the policy has been formulated in such a way so as to enhance such an inflow. From available information, the most important factors seem to include origins of investors, industries where the investment is made and business prospects. The last factor is closely related with re-invested profit, which is however not included in the official statistics, but in the long-run effects the total stock of DFI.

As mentioned in Chapter 6, the survey of investing companies included 19 HK-based companies and 3 western companies. It was found that the 22 companies had made DFI of a total amount of US$ 22.42 million in 33 FIEs in Guangdong, of which US$13.27 million was from the 19 Hong Kong based companies, and US$ 9.15 million from the three western companies. That means that the 19 HK based companies made an average investment of US$ 698,000, whereas the western companies made an average investment of US$ 3,050,000. In terms of the average size of DFI per FIE, it is US$ 387, 980 for Hong Kong-based companies, and US$ 2,288,000 for western companies.

This is consistent with the fact that investing companies from Hong Kong were much smaller than their counterparts from developed countries. As
described in chapter 4, only 5 out of 19 investing companies from HK owned 1-2 factories abroad apart from China, while the three western companies covered in the investors’ survey owned between 40 and over 300 overseas factories in places other than China.

The FIEs survey included 25 manufacturing FIEs in Guangdong, with a wider coverage of investors, including those from Hong Kong, U. S. A., Australia, Japan, Belgium and Taiwan, than the investing companies’ survey.\(^1\) Again, it is evident that the average size of DFI by western companies is substantially bigger than those of Hong Kong investors: the average size of DFI per FIE is US$ 2,940,000 for western investors, and US$ 580,000 for Hong Kong investors.\(^2\)

There is also evidence that the operations involving western investors were more capital-intensive than these with Hong Kong or Taiwan investors. This can be seen from table 7.1, which describes the frequency distribution of capital (total registered capital, including Chinese contribution in these enterprises) in the surveyed FIEs.

<table>
<thead>
<tr>
<th>Capital intensity range (US$10,000/per worker)</th>
<th>Count</th>
<th>Origin of investors</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.02-3.308</td>
<td>17</td>
<td>HK:16; Belgium:1</td>
</tr>
<tr>
<td>3.308-6.597</td>
<td>3</td>
<td>HK; HK+Japan; HK+U.S.A</td>
</tr>
<tr>
<td>6.597-9.885</td>
<td>1</td>
<td>U.S.A.</td>
</tr>
<tr>
<td>9.885-13.173</td>
<td>1</td>
<td>Australia</td>
</tr>
<tr>
<td>13.173-16.462</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>16.462-19.75</td>
<td>1</td>
<td>Australia</td>
</tr>
</tbody>
</table>

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1. see Chapter 6 for details.
2. Applied to those FIEs where there is only one foreign investor.
3. See Appendix 7 for original data.
4. Includes two cases where one involved a Japanese and another a Taiwanese investor, in addition to Hong Kong investors.
Apparently, all the FIEs involving Hong Kong investors are located in the lower end of this capital intensity distribution, while the opposite is true for FIEs involving western investors. It is however also true that investors from Hong Kong are often engaged in different sectors of production from these by western investors.

Moreover, cash is much more widely used as the medium of investment by western investors, whereas Hong Kong (and Taiwan and Japan) investors often use machinery. Among the 33 FIEs (29 by Hong Kong investors) included in the investors survey, 20 cases involved foreign investment in the form of imported machinery. Cash was involved in only 12 cases. By comparison, of the 25 manufacturing FIEs covered by the FIEs survey, which involved a wider range of investors, cash was involved in 22 cases (see table 7.2 below.)

The 20 equity joint ventures covered in the FIEs survey involved a total amount of registered foreign capital of US$30.60 million. In addition, after their operations had been started, foreign partners in 9 EJVs, along with their Chinese partners, increased their investment, mostly by re-investing profits. This increased DFI amounted to US$ 8.04 million. It means that the total DFI stock increased by 26.3% for the 20 EJVs as a whole, or 48.5% for the 9 EJVs, during a period of less than three and a half years (which is the average age of these enterprises.). It is however not possible to determine the amount of DFI in the CJVs, since equity is not calculated in these cases.

In short, while the policy provides special encouragement to overseas Chinese investors, investors who bring in large investment in a single project are western.

Another important factor that influences the size of each DFI is its business scope. The size of this sample is however too small to provide reliable evidence for this. So another source of information had to be used. The information is available in the various issues of the CAEERFT, which publishes an incomplete list of approved EJVs in China each year. During

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1. There is one exception where the foreign investors increased their investment, but the Chinese partners did not. As a result, the equity share of the foreign partners increased.
1979 to 1987, a total number of 483 manufacturing EJVs in Guangdong was included, while the total number of approved EJVs in the province was 1870. Although there is no indication so far that they are representative of all the EJVs or FIEs in the province, the size of the sample makes it a useful source of information. The detailed result of the classification of these 483 manufacturing contracts according to the International Standard Industrial Classification (ISIC) is presented in table 7.2.

It reveals that, while the average size of DFI per contract is only US$760,000, the average size in a number of manufacturing branches is considerably larger than this. In particular, two branches have an average size of DFI more than twice as big as the average of all: the average size is US$1,540,400 in division 369 (manufacture of other non-metallic mineral products) and US$3,903,100 in division 384 (manufacture of transport equipment). In contrast, some of the branches have an average size only half or less as big as the average of all. They include: division 322 (manufacture of wearing apparel, except footwear), 323 (manufacture of leather and products of leather), 324 (manufacture of footwear), 332 (manufacture of furniture and fixture). The branch which has attracted the most numerous DFI contract, that is, division 383 (manufacture of electrical machinery apparatus, appliances and supplies) has an average size of US$875,100, slightly above the total average.
Table 7.2. Industrial distribution and average size of listed EJVs in Guangdong (contracted DFI, US$10,000), 1979-1987

<table>
<thead>
<tr>
<th>Industry</th>
<th>No. of contracts</th>
<th>Total DFI</th>
<th>Average size of DFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>483</td>
<td>36743.43</td>
<td>76.07</td>
</tr>
<tr>
<td>311-312</td>
<td>18</td>
<td>1924.2</td>
<td>106.90</td>
</tr>
<tr>
<td>313</td>
<td>13</td>
<td>1226.37</td>
<td>94.34</td>
</tr>
<tr>
<td>314</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>321</td>
<td>52</td>
<td>4251.36</td>
<td>81.76</td>
</tr>
<tr>
<td>322</td>
<td>29</td>
<td>905.5</td>
<td>31.22</td>
</tr>
<tr>
<td>323</td>
<td>12</td>
<td>402.65</td>
<td>33.55</td>
</tr>
<tr>
<td>324</td>
<td>4</td>
<td>103.81</td>
<td>25.95</td>
</tr>
<tr>
<td>331</td>
<td>4</td>
<td>443.2</td>
<td>110.80</td>
</tr>
<tr>
<td>332</td>
<td>9</td>
<td>284.51</td>
<td>31.61</td>
</tr>
<tr>
<td>341</td>
<td>15</td>
<td>881.9</td>
<td>58.79</td>
</tr>
<tr>
<td>342</td>
<td>1</td>
<td>61.6</td>
<td>61.60</td>
</tr>
<tr>
<td>351</td>
<td>9</td>
<td>617.5</td>
<td>68.61</td>
</tr>
<tr>
<td>352</td>
<td>25</td>
<td>1041.64</td>
<td>41.67</td>
</tr>
<tr>
<td>353</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>354</td>
<td>2</td>
<td>252.8</td>
<td>126.40</td>
</tr>
<tr>
<td>355</td>
<td>6</td>
<td>718.69</td>
<td>119.40</td>
</tr>
<tr>
<td>356</td>
<td>43</td>
<td>1879.77</td>
<td>43.72</td>
</tr>
<tr>
<td>361</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>362</td>
<td>7</td>
<td>510.6</td>
<td>72.94</td>
</tr>
<tr>
<td>369</td>
<td>13</td>
<td>2002.5</td>
<td>154.04</td>
</tr>
<tr>
<td>371</td>
<td>1</td>
<td>28.5</td>
<td>28.50</td>
</tr>
<tr>
<td>372</td>
<td>1</td>
<td>45.75</td>
<td>45.75</td>
</tr>
<tr>
<td>381</td>
<td>32</td>
<td>3425.46</td>
<td>107.05</td>
</tr>
<tr>
<td>382</td>
<td>27</td>
<td>2002.5</td>
<td>74.17</td>
</tr>
<tr>
<td>383</td>
<td>97</td>
<td>8488.72</td>
<td>87.51</td>
</tr>
<tr>
<td>384</td>
<td>7</td>
<td>2732.2</td>
<td>390.31</td>
</tr>
<tr>
<td>385</td>
<td>24</td>
<td>1152.23</td>
<td>48.01</td>
</tr>
<tr>
<td>390</td>
<td>33</td>
<td>1359.47</td>
<td>41.20</td>
</tr>
</tbody>
</table>
Note:
311-312: food manufacturing
313: Beverage industries
314: tobacco manufactures
321: manufacture of textiles
322: manufacture of wearing apparel, except footwear
323: manufacture of leather and products of leather, leather substitutes and fur, except footwear and wearing apparel
324: manufacture of footwear, except vulcanised or moulded rubber or plastic footwear
331: manufacture of wood and wood and cork products, except furniture
332: manufacture of furniture and fixtures, except primarily of metal
341: manufacture of paper and paper products
342: printing, publishing and allied industries
341: manufacture of industrial chemicals
352: manufacture of other chemical products
353: petroleum refineries
354: manufacture of miscellaneous products of petroleum and coal
355: manufacture of rubber products
356: manufacture of plastic products not elsewhere classified
361: manufacture of pottery, china and earthenware
362: manufacture of glass and glass products
369: manufacture of other non-metallic mineral products
371: iron and steel basic industries
372: non-ferrous basic industries
381: manufacture of fabricated metal products, except machinery and equipment
382: manufacture of machinery except electrical
383: manufacture of electrical machinery apparatus, appliances and supplies
384: manufacture of transport equipment
385: manufacture of professional and scientific and measuring and controlling equipment not elsewhere classified, and of photographic and optical goods
390: other manufacturing industries.

7.2. Transfer of Technology

One of the most important objectives of the policy is to introduce advanced western technology through DFI\(^1\). The survey results provide information on various aspects concerning transfer of technology, including transfer of patent and non-patent technology and marketing assets such as a brand name to the FIEs, personnel training in the FIEs, transfer of management skills and resources to the FIEs and externalities in relationship to other Chinese enterprises.

7.2.1. Internal Transfer of Technology

Transfer of technology takes place mostly through internal means, that is, from investing foreign companies to FIEs, often evident in the early stage of the operation. Here the difference between investors from developed countries and from developing areas such as Hong Kong is once again marked. Among the 19 Hong Kong based companies that are covered by the investing companies survey, three reported transfer of special technology and two reported transfer of right to use their brand names. But in no cases were royalties paid.

In contrast, among the 6 western companies that are covered by the FIEs survey, three reported transfer of patent technology, three reported transfer of brand name. And more importantly, royalties for the patent technologies were paid in all three cases. This may be seen as an indication that technologies introduced by western investors are more advanced than by others.

It might also be the case that Hong Kong investors have a higher tendency than other investors to use second-hand machinery, since the formers have been found to use imported machinery as means of investment more frequently than others. It should be pointed out, however, that, whatever forms DFI take, in the end, most foreign investment is spent on importing foreign-made machinery. The difference lies in that, when cash rather than machinery is initially put up by the investors, decisions on purchasing

\(^1\) Technology here refers to not only technical secrets and information but also management methods and expertise.
imported machinery are made jointly by the partners. It is therefore less likely than otherwise that second-hand machines would be used.

In the FIEs survey, a more complex picture emerges, as details were obtained (see table 7.3.) on the composition of the total investment (that is, including contribution from both foreign investors and local partners.)

Table 7.3. Contribution of foreign investors and local partners in the 25 surveyed FIEs

<table>
<thead>
<tr>
<th>Contribution</th>
<th>Number of cases</th>
<th>foreign partner(s)</th>
<th>Chinese partner(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machinery and transport facilities</td>
<td>11</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Patent technology</td>
<td>4*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Brand name</td>
<td>3**</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>22</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Premise</td>
<td>0</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>right to use land</td>
<td>0</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Materials</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Note:
* Royalties were paid instantly and once in three cases. In one case, however, royalty was linked with net sale.
** Besides, one FIE obtained permission to use a foreign brand name three years after it had started its production.

Interestingly, it seems from table 7.3 that some of the Chinese partners were technically rather strong, since in four out of 25 cases, the Chinese
partners were contributing brand names, and in one case, the Chinese partner contributed patent technology.

Why did the Chinese enterprises want to join the FIEs? The explanation of Chinese managers are: their products were already a success in the domestic market, or sometimes even in geographically-limited international markets such as Southeast Asia, before joining the FIEs. What they hoped to gain through DFI was to enter or further expand international markets with the help of the marketing network of foreign partners. This is of course closely connected with the marketing assets of the foreign investing companies.

This confirms what John Thobum et al (op. cit.) have suggested, that is, one of the most important advantages that foreign have over domestic firms in China is their international marketing experience and networks.

In the FIEs survey, Chinese managers were asked to give the three most important motivations in joining FIEs. The answers in order of score are: first, to introduce new technology or renew equipments (15); second, to expand exports (9); third, to take advantages of fiscal incentives, and fourth, to introduce advanced management skills. It is apparent that Chinese partners attach a great deal of importance to technical and marketing assets of foreign investors.

One of the implications of this is that investors from export-oriented countries, such as the four Asian NICs, can offer competitive advantages to Chinese partners in relation to investors from more advanced countries, since the former have gained great deal more experience in producing and marketing labour-intensive products.

Transfer of technology also took another important form, that is, through personnel training. There are a number of avenues whereby personnel training took place. First, since almost half of FIEs were located in rural areas, the majority of the employees in the FIEs were newcomers to the industrial sector, so all of the FIEs carried out workforce training at the beginning of the operation, often with the help of personnels from foreign parent companies.
Second, a couple of FIEs were found to have sent managerial and technical personnel to be trained outside China, in the countries where the investing companies came from. For example, more than 20 managerial and technical personnel from an electronic circuit factory had received two-month training in the parent company's factory in Australia.

Third, on-the-job training constituted an important feature of the FIEs' operation. This is closely linked to the fact that, in majority cases, managerial and technical personnels from the foreign parent companies lived in the locations, where the factories were located, and took charge of the production and marketing matters of the FIEs. They constituted the basis of continuous transfer of technical and managerial assets from the foreign investors to the FIEs.

Table 7.4. Composition of employment of the 25 FIEs

<table>
<thead>
<tr>
<th>Kinds of Employee</th>
<th>Total employment</th>
<th>Average number of employees per FIE</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>10415</td>
<td>417</td>
</tr>
<tr>
<td>Production workers</td>
<td>8712*</td>
<td>348</td>
</tr>
<tr>
<td>Management and technicians</td>
<td>1324**</td>
<td>53</td>
</tr>
<tr>
<td>of which:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign personnel</td>
<td>82</td>
<td>3</td>
</tr>
<tr>
<td>Others</td>
<td>379</td>
<td>15</td>
</tr>
</tbody>
</table>

* In four cases, technical personnel are included.
** Including one case in which management was share between the FIE and the Chinese parent company, therefore not included in the employment of the FIE.

In the FIEs survey, in 15 out of the 25 manufacturing FIEs, there were foreign managers. They were often accompanied by foreign technicians (in two cases, there were only foreign managers, but no foreign technicians). They reportedly went to Hong Kong on a weekly basis, and some went there even twice or three times a week. On average, there were
3 foreign personnel in each of the FIEs, who stationed in Guangdong. (see table 7.4). But there were also other foreign personnel who did not station in Guangdong but came to visit as the need arose.

In addition, it was reported in another 4 cases that there used to be foreign managers or technicians in the earlier phase of the establishment of the FIEs, but they had left after one or two years, because the Chinese managers and technicians were believed to be competent in looking after the operations.

Provided that the majority of the FIEs in Guangdong are, as generally in China, with investors from Asian neighbouring countries, it can infer from the survey results that the management expertise and workers training constitute the most important part of the transfer of technology in the FIEs, although transfer of technical asset is also evident, often connected with investment from developed countries.

7.2.2. Semi-internal Transfer of Technology

"Semi-internal" refers to the relationship between foreign investors in FIEs and the parent companies of local partners. As in other places of China, over 95 per cent of FIEs in Guangdong are either EJVs or CJVs, while only 5 per cent of them are WFOEs. That is to say, there are almost as many Chinese enterprises which are connected to FIEs as FIEs. But What is of concern here is only those Chinese enterprises that were established producers themselves before they joined these EJVs or CJVs.

As a rule, these Chinese parent companies entered FIEs by bringing in part of their existing assets, such as factory premises, machines, land, etc. They also often provided the FIEs with a workforce. In these cases, the relationship between the FIEs and the Chinese parent companies is peculiar: the FIE is an independent business entity in terms of production and marketing, but in other aspects, such as personnel management, labour union organization, welfare, political organization, the FIEs are part of the Chinese parent companies. As a matter of fact, it is not uncommon for the FIEs and the Chinese parents to be connected in other matters such as material procurement, marketing, technical innovation, and so on. These FIEs are so unusual (compared with those whose Chinese parents did not
have any experience in the production before) that they have been given a special name, that is, "marriage-type" FIEs.

Among the surveyed 25 manufacturing FIEs, 7 fell into this type, of which three of the Chinese parent companies were State-owned enterprises, and four collective enterprises. A common sight on the sites was a newly-fabricated production and office building of the FIE located within the large compound of old factory buildings of the Chinese parent company.

In the other 18 FIEs where the Chinese partners knew little about the production before the collaboration, they usually left the FIEs largely to the management. It emerged from the survey that the "marriage type" FIEs were characterized by much closer cooperation between the FIEs and the Chinese parent companies in a number of ways.

To be sure, the two parties do not always agree upon what they will cooperate on. A notorious case that has been the occasion of complaints by foreign investors, concerns FIEs which did not want to share responsibility with the Chinese parent companies in looking after the elderly or sick employees by assuming responsibility for them from the parent companies. The foreigners wanted only the best workforce from the Chinese parent company, and the Chinese parent companies usually tried to prevent the FIEs from achieving this. There are all sorts of mutually beneficial cooperation between the two, although the closeness of operations varies from case to case.

In "marriage type" FIEs, the Chinese parent companies tended to have a much clearer idea about what they wanted from the foreign partners in the first place. So in the process of operation, the Chinese parent companies regarded the FIEs as "windows" to the outside market and "models" for introducing new technology. The parent companies also kept a close eye on western-style management practice, but it seems that they often had more reservations on this aspect than other matters.

During the survey, an interesting case was brought to my attention by a Chinese executive in a FIE. He commented that the foreign manager in their factory was very strict, which was good, but sometimes he almost treated the workers like machines. The foreign manager demanded that his
order be observed strictly, no matter what they were. In this way, workers became unconcerned with anything which was not their immediate responsibility; a sense of collective responsibility was lost.

Indeed the workers were so unhappy that, one year after the operation started, some demanded to be transferred back to their Chinese parent company. Although after much persuasion, the majority of them remained in the FIE, more than ten workers returned to their parent company in the end. It was also mentioned by the informant that, in real terms, workers in the FIE did not earn considerably more than their counterparts in the Chinese parent company, although they had to work much harder, because the FIE used a production line which require constant attention by the workers. The Chinese manager obviously had much sympathy for the workers.

Technically speaking, with all the previous experience and technical capacities, these Chinese parent companies were in a better position to absorb new technologies. The most striking example was No.13, a CJV producing building materials. The Chinese parent company had more than thirty years of experience in this production, but their equipment and technology were out-of-date. In 1985, the company received an allocation from "Technology Renovation Fund"1 of the central government, amounting to US$ 2.1 millions. But the lowest cost for purchasing one production line was US$ 2.7 millions, and the company had eight such production lines.

The managers then came to the decision that they would make up the inadequate funds to purchase one production line by introducing DFI, while the renovation of the eight old production lines had to be accomplished by assimilating the new technology from the imported production line. The technicians from the Chinese parent companies had worked on the production line of the FIE from the very beginning. As a matter of fact, it was largely with the help of the technicians from the Chinese parent company that the imported production line was installed and put into operation. The manager of the FIE, a local Chinese, said that they

1. It is funded out of depreciations of state-owned enterprises, which, before the enterprise reform in 1984, were submitted to the central government. The later then formed this Fund and allocated it to state-owned enterprises for technical renovation purpose.
were making steady progress in achieving their original goal, that is, to renovate the old production lines in their parent factory.¹

The Chinese parent companies and the FIEs also cooperate with each other in other matters, which sometimes have much to do with the shortcomings of the existing economic management system. Currently, the State maintains its control of state-owned, or collective enterprises to a lesser extent, through material and financial resource allocation, monopolistic foreign trading, and taxation, etc. In contrast, the government adopts a much relaxed control of the FIEs: they are entitled with a number of rights, including the right to import, export products, and access to foreign loans and foreign expertise.

The taxation levied on FIEs is considerably lower than that on state-owned or collective enterprises, particularly in the early stages of the operation: under the current regulations, large- and medium-sized state-owned enterprises are levied income tax at an even rate of 55 per cent, while income tax rate for EJVs is only 30 per cent, apart from a 10 per cent local surtax - which is often exempted. The difference is especially great in the early stage of operations due to tax holidays available to FIEs.

Another important field is exports and imports business, which is related to the right to retain foreign exchange earnings and the obligations to pay tariffs. A domestic entity has to surrender the majority of its foreign exchange earnings to various level of governments, while an FIE is entitled to keep all the foreign exchange earnings.²

FIEs can import production facilities, spare parts (for their own use) free of tariff; raw materials can be imported free of tariff and no import license is required by FIEs if the products are to be exported again later; the FIEs are also exempt from the consolidated industrial and commerce tax (ICT) when the products are exported. In contrast, the majority of domestic

¹. From the point of view of foreign investors, this is of course unacceptable.
². According to John Kamm, Guangdong can retain 30 per cent of total exports earnings in foreign exchange from January 1, 1985. Producers in high priority exports industries such as electrical machinery and instruments, and light industries were eligible to retain all or a majority of foreign exchange earnings. See John Kamm, "Reforming Foreign Trade", in Ezra F. Vogel, op. cit., p376.
enterprises are not allowed to handle their own imports and exports and are subject to all kinds of taxation and fee charges.

Moreover, FIEs have automatic access to the Foreign Exchange Adjustment Centres (FEACs), while access by domestic enterprises are restricted. These centres have been established, following the announcement of the foreign investment encouragement provisions in 1986, provide venues for these enterprises to exchange foreign exchanges and Chinese currency at nonofficial exchange rate. The rate is usually lower than the official exchange rate but higher than black market rate.

After entering a partnership with a foreign investor in FIEs, it is now possible for the Chinese parent enterprise to carry out some of its operations under the name of the FIEs and take advantage of all the benefits that FIEs are entitled to enjoy. The interviewees were reluctant to elaborate on these practices. But they did admit that these practices were regarded as part of the benefits of joining a FIE.

For example, an EJV producing machine tools exported a volume of products totalling US$ 2.3 millions in 1989, but only part of the products, or more precisely, the products valued at US$ 1.25 millions, were actually produced by the FIE. The rest of the output was produced by the Chinese parent company. In doing this, the Chinese parent company was able to retain a greater portion of its foreign exchange earnings.1

The FIEs can also benefit from the partnership under the current system. Sharing domestic marketing channels or channels for procuring domestic materials seem to be the two major sources of such benefit. State-owned enterprises often have access to subsidised materials allocation in the State plans; these are cheaper than market prices. In the survey, two FIEs obtained part of their supply from State plans through their Chinese parent companies. The sharing of domestic marketing channels is another source of benefit for the FIE. Engholm (1989, op.cit) once reported that an American company, producing electronic goods in Beijing, made profits from the fact that the products of that industrial bureau were heavily

1. The implication is that exports by FIEs in official records might be overstated.
It is possible that the FIEs can make a profit by shifting some of its sales to the Chinese parent companies, and sometimes they do.

In sum, it seems that in the "marriage-type" of CJVs and EJVs, transfer of technical information from the FIEs to their Chinese parent companies is quite significant, but transfer of management skills are largely hampered by the rigid existing organizational structure in these Chinese enterprises. On the other hand, the "marriage-type" CJVs and EJVs seem to have some potentially undesirable effects on the control of the government over the domestic enterprises, particularly state-owned enterprises.

7.2.3. Technological Externality

The strong impression is that the technological externality of DFI are not captured in the available data. It is not an exaggeration to say that DFI has brought in a fresh and stimulating air to the Chinese enterprises and among people in all walks of life. FIEs’ new buildings, the uniform that their employees wear, the way their production floors and offices are arranged and managed, the methods by which their products are advertised and marketed, all of these exert excitement as well as challenge to domestic counterparts wherever and whenever they appear.

In the strictly technical sense, however, the effects can be examined through the FIEs’ procurement and marketing activities, which form the themes of the following two sections.

7.3. Export Performance of the FIEs

It had been the hope of the Chinese government that FIEs would play a pioneering role in the creation of an outward-looking economy. The empirical evidence suggest that FIEs in Guangdong have gradually embarked on such a cause.

Among the 29 HK-related FIEs covered in the investing companies survey, one-third were found to be engaged in exclusively export-oriented production. Due to complications caused by the fact that the surveyed companies had more than one operation in Guangdong, it was not feasible to investigate how much of their output were exported when the FIEs were
also involved in domestic sales. This shortcoming was later made up in the FIEs survey.

The surveyed 25 manufacturing FIEs show a relatively high propensity to export: only two FIEs sold their entire output within China, and this included one case where the product was approved as an import-substitute by the Chinese government. The other companies exported various percentages of their products. The exports ratio varies, according to whether it was measured in terms of product volume or sale value. In terms of volume, 68 per cent of the FIEs exported over half of their output, while in value, there were only 60 per cent of the FIEs whose sale income from the export was over half of their total sale income.

### Table 7.5. Export ratio of the surveyed FIEs, 1989

<table>
<thead>
<tr>
<th>Export Ratio(%)</th>
<th>No. of FIEs</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In volume</td>
<td>in sale value</td>
</tr>
<tr>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>0-10</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>11-29</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>30-49</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>50-74</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>75-99</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>100</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>no answer</td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>

The form in which these data occurs minimizes the gap in export ratio between the volume and value. In three cases, a smaller export ratio was reported when measured in value than in volume, with difference ranging from 50 per cent to 21 per cent. In only one case was a bigger export ratio reported when measured in value than in volume.

This gap indicates that the products sold in the domestic market were higher priced than the export. This could be either because the domestically sold products were higher value-added ones (that means that the FIEs
export low-end products to be competitive in the world market) or because they are artificially higher priced (that means that the Chinese consumers were obliged to pay more than needed). The evidence so far available points to the former: the profitability of domestic sales in many FIEs was considerably higher than exports. That is to say, domestic sales subsidized exports.

Table 7.6. Profit Table of No. 1989. 12.30

<table>
<thead>
<tr>
<th>RMB1,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total sale income</td>
</tr>
<tr>
<td>of which:</td>
</tr>
<tr>
<td>from export</td>
</tr>
<tr>
<td>minus:</td>
</tr>
<tr>
<td>Sale tax</td>
</tr>
<tr>
<td>Product cost</td>
</tr>
<tr>
<td>of which:</td>
</tr>
<tr>
<td>export product cost</td>
</tr>
<tr>
<td>Gross profit</td>
</tr>
<tr>
<td>Minus:</td>
</tr>
<tr>
<td>marketing cost</td>
</tr>
<tr>
<td>management fees</td>
</tr>
<tr>
<td>of which:</td>
</tr>
<tr>
<td>Interest payments</td>
</tr>
<tr>
<td>loss from currency exchange</td>
</tr>
<tr>
<td>Net sale profit</td>
</tr>
</tbody>
</table>

Table 7.6 provides an example. The factory, a Sino-HK EJV in Shenzhen, produced communication equipment. While the overall profitability of the factory was about 10 per cent in 1989, the profitability for domestic sale was 26.47 per cent and minus 1.76 per cent for export. If the figures are reliable, this would be an unmistakable indication that, this factory,
although inefficient as it is in an international market, has managed to make a respectable profit by overcharging the Chinese consumers.

In relation to these products which are mainly import-substitute, the evidence is that, under the protection of Chinese tariff and import control, FIEs have been able to charge a relatively higher price, although the production cost in China is reportedly lower than that in more developed countries. For instance, one of the most fashionable cosmetic products in last couple of years in China has been a moisturizer product, that is, "Oil of Ulay", being produced by an EJV in Guangzhou. The price of the product, containing 30 ml of the moisturizer, was RMB 7.5 (about £0.75 at black market exchange rate) in Guangzhou in May 1990. In comparison, the product, containing 125 ml, was priced as £2.69 in London: the price in Guangzhou was actually 16 per cent higher than in London.

It is often argued that the accessibility of a domestic market by FIEs is a price to pay for the transfer of technology. It is however difficult to see in this case that the production of the moisturizer can promote technological advancement in China. Furthermore, this case is not alone. To take another example, the retail price of an Audi car, being produced by another EJV, was US$42,000 in China in early 1990, several times more expensive than those sold in the international market. All these are of course made possible by China’s import control. The cost is the combination of loss for customs revenue and high price for consumers.

The difference in export ratios between FIEs with western investors and other investors is significant: among the five FIEs that export less than 50 per cent of their products in volume, four were FIEs with western investors. The only exception was the FIE with Australian investment, which exported 85 per cent of its product. Its manager indicated that their product was of high quality but also relatively expensive to Chinese buyers. They had therefore to rely on exports at that. But they were making all efforts to change this situation. One such effort was that the factory proposed to set out the standard of its product, which was later accepted by the Ministry concerned to be adopted as the standard for the whole trade.

What is relevant is not that the products of these western companies were not saleable in the international market (although maybe not as profitable
as in the domestic market), but that the companies invested in China in order to supply the Chinese market. Whereas many Hong Kong, and increasingly, Taiwan, investors operated in China to take advantage of the low production cost for exports. The objectives are rather different.

It was also found that the export ratio is negatively correlated with capital intensity. The correlation coefficient is minus 0.251 (see table 8.9. below). This suggests that two of the Chinese government's policy objectives in attracting DFI in manufacturing, that is, capital inflow and export-promotion, are contradictory to each other.

The FIEs seem to have raised their export ratios considerably between 1989 and 1990. When asked whether their sales were increasing, decreasing or had not changed, and how the changes were distributed between domestic sales and exports, 12 respondents indicated that their total sales had increased between April of 1989 and 1990, but only three, that the growth happened in the domestic sales. That means that the export rate had risen between 1989 and 1990. This is mainly because, under the austerity programme, the domestic market in China shrank, which forced the FIEs to export more. Little has changed in the channels whereby these FIEs exported. Over half the exporting was handled by the foreign partners.

In sum, the evidence seems to suggest that, the propensity to export among the FIEs in Guangdong were relatively high, particularly among the FIEs related with Asian investors. On the other hand, however, there is also evidence suggesting that the domestic consumers subsidized some exports. Furthermore, in the case of import-substitute FIEs, the domestic consumers seemed to have not benefited from the production of FIEs in forms of low price. In contrary, they have been forced to pay an unreasonably high price. This is in addition to the loss of government revenue from import duties, resulted from import-substitute.

7.4. Productivity and Efficiency of the FIEs

Efficiency has different meanings in micro- and macro-economics. As far as micro-economic efficiency is concerned, it is often measured by profitability. It should be pointed out however that high profitability does
not necessarily mean that the enterprise is socially beneficial in macro-economic terms. This is especially so in China, since the price system is so distorted. If product prices are not subject to State control, they tend to inflate and therefore often yield a high profitability for individual enterprises, and vice versa.

Having said that, it is still desirable to look at the FIEs’ technical and economic performance, not only because it has an effect on DFI in the future, but also because local governments and employees receive a share in it.

a). Gestation period: while there are wide variation from case to case, the average time between the date of official registration of an FIE and the official start of production is 15 months. This however does not include the period preceding the approval of the application, which is the preclude to registration with the local authority. The regulations stipulate that a reply to an application must be given by the responsive department within 2 months from the date of its receipt, although it might take a shorter time, depending on the efficiency of the relevant departments. The gestation period is only roughly half as long as that of a typical domestic project of comparable size takes.

b). Composition of production costs: Most managers were reluctant to give details of their operations, although they were much more prepared to give gross output and gross profitability figures. The total revenue of the 24 FIEs, on whom data is available, amounts to RMB 1,040 million, or an average of RMB 43.4 million per FIE.¹ By Chinese standards are these FIEs more than medium sized².

Table 7.7 gives some idea of the composition of the production cost in these FIEs. Regrettably, the managers did not give answers to all items, but

¹ In six cases, only gross output figures were made available. It is then assumed that the gross output equals revenue.
² The official statistics classify industrial enterprises into three scale groups, ie, large-scale, medium-scale, and small-scale, according to either the production capacity or the initial capital value of the fixed assets. Since these two values are closely related to the gross output of the enterprises, it is helpful to know that the average gross output per enterprise of the three groups in 1988 was RMB 96.9 millions, RMB 30.39 millions and RMB 1.89 millions, respectively.
the results, if reliable, do give us a glimpse of the basic features of the operations.

First, the profitability was indeed not very high; second, the tax was low by any standard; third, the material input accounts for a large portion of the total revenue; fourth, electricity and water fees cost the producers almost as much as does manpower; and finally, the share of labour cost was very low.

Table 7.7. Average composition of production cost per unit of sale value in surveyed FIEs.

<table>
<thead>
<tr>
<th>Components of sale value</th>
<th>No. of replies(^1)</th>
<th>Average share of sale value(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Wages</td>
<td>12</td>
<td>9.1</td>
</tr>
<tr>
<td>b. Material input</td>
<td>16*</td>
<td>59.0</td>
</tr>
<tr>
<td>c. Fee of electricity and water</td>
<td>6</td>
<td>8.4</td>
</tr>
<tr>
<td>d. Transport cost</td>
<td>4</td>
<td>1.2</td>
</tr>
<tr>
<td>e. Depreciation</td>
<td>4</td>
<td>7.2</td>
</tr>
<tr>
<td>f. Loan service</td>
<td>5</td>
<td>7.3</td>
</tr>
<tr>
<td>g. Taxes</td>
<td>2</td>
<td>5.2</td>
</tr>
<tr>
<td>h. Net profit</td>
<td>7**</td>
<td>7.0</td>
</tr>
<tr>
<td>i. Others</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total \(104.4***\)

Note:
* Excludes a case in which the ratio depended on whether the products was exported (96.8%) or domestically sold (60%). It is obvious that the profit rate related to export was minus.
** Includes one case in which the profit was minus 0.87 per cent.
*** The total does not equal to unity due to variations in the size of each groups.

\(^1\) In 6 out of the 25 FIEs, no answers were given, out of which, the managers from two FIEs did hint that their net profits were minus. In another 5 cases, only gross profit, presumably including taxes, depreciation and net profit, was given in response to my enquiry, which gives an average gross profit rate of 25.4 per cent, higher than that in the above table.
The managers were very concerned with the high cost of material inputs. These accounted for almost 60 per cent of total revenue. Currently, this high level resulted from three main factors:

First, most of the surveyed FIEs used large portion of imported materials. Since the factories often used dozens of different materials, questions were raised about the source of major material inputs in the enterprises' production. The results, shown in table 7.8, indicates that the FIEs imported approximately half their material inputs.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio of domestic</td>
<td>Percentage in volume</td>
<td>in value</td>
</tr>
<tr>
<td>materials</td>
<td>in volume</td>
<td>in value</td>
</tr>
<tr>
<td>0</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>1-10</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>11-30</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>31-50</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>51-70</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>71-90</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>91-99</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>100</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>No answer</td>
<td>4</td>
<td>8</td>
</tr>
</tbody>
</table>

Second, the nearly monopolistic handling of the imports (and exports) by the foreign partners added more cost to the material (some HK investors admitted in the interviews that their income from the FIEs was mainly derived from the handling of imports and exports for the FIEs rather than from dividends). Some Chinese managers estimated that the price of materials offered by their HK partners were usually about 10 per cent higher than market prices, but they could do little about it, since it was

1. It applies to the major raw material or semi-components in the factories.
equally costly for the Chinese partners to search for material supplies due
to the long-standing insulation of the Chinese enterprises from the world
market. Third, for products sold inside China, substantial tariffs are
charged on imported materials.

Compared to table 7.4, the gap in ratio of domestic material input
measured in volume and in value is much smaller than in the export ratio
(see table 7.8). This is because there is little price difference between
domestic and imported materials. It becomes even more so when the factor
of quality is taken into account; this generally favours imported materials.

In a number of cases, price differentials between domestic and international
materials were reported. They fell into two types. The first type related to
the relative competitiveness of certain Chinese products, while the second
one was connected with the FIEs' efforts to increase domestic content.

In the first group, FIEs purchased their material inputs on the domestic
market because the price was competitive or for other marketing reasons.
For example, a food processing company using milk powder and coffee
beans reported that the price of the domestic material was 10 per cent
cheaper than in the international market. But a telephone producer using
electronic semi-components reported that the domestic components were
actually 2 to 5 per cent more expensive than those imported, but they kept
using the more expensive domestic materials in order to be qualified for
entering the National Contest of Excellent Products, since their sales
depended to a great extent on the domestic market

In the second group, FIEs had been engaged in developing their own
domestic supply sources by a variety of routes to reduce production cost.
One route was to develop "supplier and buyer" networks among the FIEs.
This can be the natural outcome of the growing number of FIEs. There
have been a number of reports that some new FIEs have been established to
supply other FIEs. For example, a joint venture between Shenzhen SEZ
government and a Japanese steel company was established to serve this
purpose; since it occurred in the wake of June 4 events, it was much
publicized. In the survey, a number of FIEs were found to have either
produced material supplies for other FIEs or received supplies from other
FIEs.

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These new FIEs were established to serve existing FIEs, so forming a self-generating mechanism of new DFI. But it is also important to note that local governments usually played an important role in that development. No. 12 can exemplify this point.

No. 12 is an EJV established in 1986 between a Japanese company, a Hong Kong company and the General Industry Development Corporation, an investment arm of the host local government (Huizhou municipality). It had been producing automobile radio parts, and had normally imported 70 per cent of its material inputs. But by May of 1990, 70 per cent of the input were purchased inside China. Five-sevenths were supplied by another EJV in the same city, established in 1988 between the same Chinese partner, the investment arm of the local government, and the same Hong Kong partner, but with a group of small Japanese companies with a special purpose to meet the input needs of the FIE locally. The manager said that the price of these domestic supplies was 15 per cent lower than the imported ones. The FIE of No.12 in turn provided one-fourth of its products as inputs to another EJV, co-owned by the same Chinese partner, the same Hong Kong company but with a famous European producer.

Another route for the FIEs to develop domestic supplies was through establishing special cooperation relationships with other domestic firms. At least two FIEs reported that they entered cooperation contracts with domestic firms which, with the help of the FIEs, developed and produced materials which meet the quality standard for export products. A blueprint paper producer (No. 24), a EJV in Zhuhai SEZ entered such a contract with a paper manufacturer in Jiangmen city. As a result the latter was able to supply paper at a price 40 per cent lower than imports (this includes the import tariff).

However, compared to the growing tendency to export (for more details, see Chapter 9), it is evident that the use of domestic materials has not been increasing significantly. When asked whether the use of domestic materials had been increasing, or decreasing, or not changing, during the year from March of 1989 to March of 1990, out of 25 cases, only 4 said 'increasing', 11 'unchanging', none 'decreasing' and the rest, 10, could not decide, either because they had not started production then or for other reasons. In
comparison with the speedy increase in export ratios, the increase in domestic content is obviously slow in progress.

The high cost of electricity is attributable to two factors. First, a large number of FIEs generated power for themselves by employing low-capacity generators from time to time, since there was shortage of power supply in a wide range of areas. In some localities, the power was out of supply regularly, three or even four days every week.

Second, the price of external electricity supply has risen rapidly. For example, the recent price rise of electricity in May of 1990 almost doubled the previous price. This is related to the fact that a large number of small scale power generating plants have been put into operation in a widespread effort by local governments to alleviate the severe shortage. Small-sized power plants however can not achieve economies of scale. Officials from Foshan municipality reported that each of the six counties under its jurisdiction had built a power plant in the preceding two years or so. Moreover, these plants used large amounts of imported fuel, since they could not get an oil allocation from the central government (and oil is one of the raw materials which is heavily subsidised.). This raised the power price even further.

The wholesale price (to the provincial electricity network) difference between various power plants was marked, according to my survey, in early 1990: the price was about RMB0.10 per kilowatt-hour by Huangpu Power Plant, a state-owned enterprise, RMB 0.37 per kilowatt-hour by Shajiao Power Plant, an EJV in Shenzhen, and RMB 0.42 per kilowatt-hour by one of the power plants in Foshan.

c). Productivity: The discussion of productivity is hampered because, due to the limitation of the collected data, productivity can only be measured in terms of gross output per worker or per unit of capital, i.e., labour (gross) productivity and capital (gross) productivity. On the other hand, however, this is an advantage, since it makes it possible to compare with other domestic firms. The original data for various surveyed FIEs is included in Appendix 7. Average labour productivity is RMB105,570 yuan per employee, which compares favourably to other sectors. In 1988, labour productivity was RMB 25,065 yuan per employee in state-owned industry,
and RMB 16,022 yuan per employee in collective industries. Thus labour productivity in the FIEs is about four times as high as that of state-owned enterprises by this measure.

The present sample was perhaps biased to these FIEs that have higher productivity. According to a survey of 261 FIEs (including all trades, so not exactly comparable) conducted by Guangdong Statistics Bureau, the average labour productivity was RMB44,600 yuan per employee. But even this figure is still much higher than both state-owned and collective industries.

Table 7.9. Correlation coefficients among variables of surveyed FIEs

<table>
<thead>
<tr>
<th></th>
<th>x1</th>
<th>x2</th>
<th>x3</th>
<th>x4</th>
<th>x5</th>
<th>x6</th>
<th>x7</th>
</tr>
</thead>
<tbody>
<tr>
<td>x1: employment</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>x2: total registered capital</td>
<td>-.111</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>x3: sale value</td>
<td>.851</td>
<td>.222</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>x4: labour productivity</td>
<td>-.056</td>
<td>.633</td>
<td>.328</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>x5: capital productivity</td>
<td>.766</td>
<td>-.25</td>
<td>.638</td>
<td>-.004</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>x6: export ratio</td>
<td>.062</td>
<td>-.544</td>
<td>-.13</td>
<td>-.404</td>
<td>-.709</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>x7: capital intensity</td>
<td>-.288</td>
<td>.407</td>
<td>-.181</td>
<td>.227</td>
<td>-.263</td>
<td>-.251</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: total registered capital includes the Chinese contribution in the FIEs.

It would be interesting to know whether there is connection between productivity and various other features in the FIEs. The correlation coefficients among various variables are thus computed. The result, as shown in table 7.9, suggests: first, although labour productivity is found to be positively correlated with capital intensity, as one would expect, the correlation coefficient was only 0.227. That is to say, capital intensity is not an important condition in achieving high labour productivity for these FIEs. It follows that there is no distinction in productivity between FIEs with western and non-western investors, particularly Hong Kong.

3. for source data, see appendix 7.
Second, labour productivity is found to be negatively correlated with export ratio (-0.404). In turn, export ratio is also negatively correlated with capital productivity, although the correlation coefficient (-0.079) is not significantly different from zero. These two together seem to suggest that export-oriented FIEs are the ones that have neither a higher level of gross labour productivity nor gross capital productivity. This is perhaps another piece of evidence suggesting that exports by FIEs in Guangdong may have been expensive in terms of social cost.

7.5. Conclusion

This chapter has attempted to examine various micro-economic characteristics of the surveyed FIEs in Guangdong, and to what extent the policy objectives have been born out in reality, and the related cost to China. The result shows a number of interesting features in relation to the four policy objectives:

First, the size of foreign capital inflow per DFI is positively associated with western investors rather than overseas Chinese investors, but the current legislation offers special incentives to the latter out of political considerations; there is a major difference in capital intensity between FIEs with western investors and non-western investors in favour of the former; another important factor is the sector which DFI operates in: the average size of DFI in the manufacture of transport equipment is five times as big as average size of all FIEs, while the average sizes in manufacture of wearing apparel, footwear, leather and leather products and so on are all considerably below the average. The industry which has received the most numerous DFI has an average size of DFI of less than one million U.S. dollars, indicating that the DFI in Guangdong has been dominated by small-scale and labour-intensive operations.

There is however no strong positive connection between capital intensity and labour productivity. Consequently, there is not clear distinction in productivity between FIEs with western and non-western investors.

Second, overall transfer of technology has been significant, although most of the technologies are standardized ones. This has mainly taken place
through means internal to the plant rather than to the market. In all the FIEs, the transfer of management expertise and workers training constitutes the most important element, since the majority of the workforce are newcomers to industries, and the production is relatively new to Chinese partners. On the other hand, in FIEs where the Chinese parent companies are established producers, the transfer of technical information and the sharing some of the fiscal and administration privileges that FIEs are entitled to, forms an important benefit to the Chinese side. This however poses a threat to the state's control over these enterprises, particularly those state-owned enterprises.

Beyond FIEs and their Chinese parent companies the impact is more psychological and indirect than concrete and direct. This is because, on the one hand, the backward and forward linkages, although evident are still very limited. On the other hand, FIEs' products, when sold in the domestic market, are often doubly protected by their famous brand name, when the investor is a well established international producer, and by the legislation (such as a lower taxation rate on their income and so on). They therefore do not stimulate genuine competition from domestic enterprises.

Third, most of the FIEs have a relatively high propensity to export: 60 per cent of the firms received over fifty per cent of their total sales income from exports. These is evidence suggesting however that domestic consumption might have subsidized exports by some FIEs. This is especially difficult to justify where no significant transfer of technology is apparently involved.

It is found that export propensity and capital intensity is negatively correlated, which on the one hand suggests that two of the policy objectives, that is, to promote exports and introduce foreign capital, are contradictory to each other; and on the other hand, it indicates that exports by these FIEs have been mainly labour-intensive. Moreover, it was evident that export propensity is negatively correlated with labour productivity; that means that exports by FIEs are not the indicator of competitiveness.

Fourth, gross labour productivity in the FIEs were at least 100 percent higher than state-owned enterprises, and to a greater extent, collectively-owned enterprises, although the value added per unit of sales income was
low. Wage bill and taxes together accounted for less than 15 per cent of total revenues, while material inputs, at least half of them imported, took up 60 per cent of total sale value. The future improvement in efficiency lies in a reduction of electricity and material inputs costs, in which local governments were found to play an important role. But there is evidence that the widespread development of small-scale power plants has resulted in a loss in economies of scale and macro-economic efficiency.

On the other hand, it is evident that the higher productivity of FIEs has not been reflected in lower prices for domestic consumers. In a number of cases, products produced by FIEs were sold at a price considerably higher than imported ones, if the latter are to be allowed.

All these findings depict a very complicated picture of FIEs, a picture conflicting enough to raise one's doubts about the enthusiastic remarks about DFI in China, although it should be recognized that, due to the limited size of the sample, these results should not be regarded as conclusive.

Furthermore, Chapter 5 shows that the policy goals were not really concerned with these FIEs, but with their overall impact on China’s capital formation, growth of exports, productivity and efficiency, and ultimately economic growth. The question how the macro-economic impact of DFI in China is matched to the policy goals, and at what cost has to be answered by examining macro-economic evidence in these fields, which will be the task of the following four chapters.
In the last chapter, the operational characteristics of the surveyed FIEs in Guangdong were examined, and some micro-economic conclusions were drawn in relation to the policy objectives. In this chapter and the chapter that follows, attention will be focused on the evidence of the attainment of the three principle macro-economic objectives that the policy was intended to promote: expansion of capital formation, growth of export, efficiency and economic growth. Whereas other impact, both intended and non-intended by the policy, will also be examined at various points. Admittedly, available data are so scarce that a comprehensive assessment is not possible at present. What follows is therefore only tentative and preliminary, although every effort will be made to take into account all available information.

8.1. China’s Capital Formation and DFI’s Direct Contribution

During the 1980s, China’s accumulation rate appears to have maintained a high level. As table 8.1. shows, the ratio of accumulation to total national income rose from 31.3 per cent during the sixth Five-year Plan period, from 1981 to 1985, to 34.3 per cent during the seventh Five-year Plan period, from 1986 to 1988. It has however been suggested that, the statistics overstate substantially the accumulation rate due mainly to the two following reasons:

First, depreciation has been constantly under-estimated. This is because, on the one hand, the legally-binding depreciation rate has been very low, only 4.1 per cent in 1981 and 4.9 per cent in 1988. On the other hand,

1. The accumulation rate equals accumulation value divided by national income, while the value of accumulation (A) is calculated by the following formula:
   \[ A = \text{fixed capital accumulation} + \text{circulating capital accumulation} - \text{total fixed asset investment-depreciation} - IC \times \text{increase in inventory} \]
   where IC stands for the portion of fixed asset investment which does not contribute to the increase in fixed capital. It may be referred to as investment cost (IC).

Depreciation is calculated by multiplying the original value of fixed capital stock by the depreciation rate. Although there is an increase in the rate during the period, this increase is not sufficient, since prices have risen rapidly in recent years. As a result, accumulation includes what ought to be included in depreciation.

Table 8.1. China’s accumulation rate: historical record

<table>
<thead>
<tr>
<th>Period</th>
<th>Accumulation rate</th>
<th>Share of productive accumulation as a share of total accumulation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1953-57</td>
<td>24.2</td>
<td>56.8</td>
</tr>
<tr>
<td>1958-62</td>
<td>30.8</td>
<td>86.7</td>
</tr>
<tr>
<td>1963-65</td>
<td>22.7</td>
<td>66.0</td>
</tr>
<tr>
<td>1966-70</td>
<td>26.3</td>
<td>74.5</td>
</tr>
<tr>
<td>1971-75</td>
<td>33.0</td>
<td>75.3</td>
</tr>
<tr>
<td>1976-80</td>
<td>33.2</td>
<td>67.0</td>
</tr>
<tr>
<td>1981-85</td>
<td>31.3</td>
<td>55.4</td>
</tr>
<tr>
<td>1986-88</td>
<td>34.3</td>
<td>65.1</td>
</tr>
</tbody>
</table>

Note: productive accumulation refers to the part of accumulation that is used in productive purpose.

Second, in the 1980s, the so-called investment cost (see footnote 1 of the last page), that is, the portion of FAI that does not constitute part of the increase in fixed capital, has also risen substantially. But the statistics still apply the old method to estimate this amount by multiplying the total amount of FAI by a constant 4 per cent. In reality, this ratio had risen to more than 10 per cent by 1988. As a result, accumulation is again overstated.

After allowing for these two factors, Guo estimates that China’s actual accumulation rate from 1981 to 1988 is, in percentage terms: 26.1 per cent, 26.0 per cent, 26.4 per cent, 27.6 per cent, 30.9 per cent, 29.6 per cent, 28.3 per cent, 26.5 per cent. The differences from official statistics range from 2.2 per cent to 7.7 per cent. In other words, the official

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statistics overstate the accumulation rate by 7.9 per cent in 1981. By 1988, the overstatement had increased to 22.4 per cent.

The implication of Guo's result is that China's accumulation rate in the 1980s is substantially lower than previous decades, although in the 1980s the Chinese economy experienced the fastest growth in its history, which might be conducive to a higher accumulation rate, given the phase of China's economic development.

Moreover, during the 1980s, an substantial amount of foreign capital has been absorbed by China. As table 8.2 shows, between 1981 and 1988, foreign capital accounted for 4.5 per cent of China's FAI. Assuming the propensity for DFI to be used in fixed assets is the same as that of all FI, it then follows that DFI accounted for 1.6 per cent of China's FAI during the same period.

Table 8.2. Share of FI in China's FAI, 1981-1988

<table>
<thead>
<tr>
<th>Year</th>
<th>TFAI (RMB)</th>
<th>FI's Share</th>
<th>DFI/FI (%)</th>
<th>DFI's share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>96.1</td>
<td>3.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td>123.0</td>
<td>4.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983</td>
<td>143.0</td>
<td>4.6</td>
<td>46.2</td>
<td>2.13</td>
</tr>
<tr>
<td>1984</td>
<td>183.3</td>
<td>3.8</td>
<td>52.5</td>
<td>2.00</td>
</tr>
<tr>
<td>1985</td>
<td>254.3</td>
<td>3.6</td>
<td>42.2</td>
<td>1.52</td>
</tr>
<tr>
<td>1986</td>
<td>302.0</td>
<td>4.4</td>
<td>30.9</td>
<td>1.36</td>
</tr>
<tr>
<td>1987</td>
<td>364.1</td>
<td>4.8</td>
<td>31.3</td>
<td>1.50</td>
</tr>
<tr>
<td>1988</td>
<td>449.7</td>
<td>5.9*</td>
<td>36.6</td>
<td>2.16</td>
</tr>
<tr>
<td>81-88</td>
<td>4.5</td>
<td></td>
<td>1.62</td>
<td></td>
</tr>
</tbody>
</table>

Note:
TFAI: total fixed asset investment in China

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1. For Column A and B: SSB, *FDSN, op. cit.*, p.353; for Column C: see table 1.5 in Chapter 1 and Column A in table 7.1.
FIFA: foreign investment in fixed asset.

*: The original ratio is 5.7. It has been adjusted to include the three SEZs in Guangdong that are originally excluded in the data of FI but included in the data of TFAI.

The implication is that, if we subtract the annual inflow of foreign capital from China's existing accumulation, the accumulation rate will be even lower than the one estimated by Guo by at least 4-5 per cent.

On the other hand, the official statistics shows that a very high proportion of accumulation was diverted to non-productive purposes (see Table 8.1.). This is particularly significant in the first half of the 1980s.

This decline in productive accumulation might be explained by the fact that, during the adjustment period between 1979 and 1981, and the years immediately after that, a great deal was spent in improving people's living conditions, including housing. The ratio of housing expenditure to total basic construction (accounting for 70 per cent of fixed asset investment) increased from 11.8 per cent during 1976-80 to 21.3 per cent during 1981-85.¹

On the other hand, the increase in non-productive accumulation can be attributed to a great extent to the fact that the 1980s witnessed a surge in China's real estate business. A great number of hotels, guesthouses and amusement facilities were constructed. The surge is closely related to the open-door policy: much of the construction was initially targeted at foreign tourists and foreign businessmen, at least in name.

The situation was uneven, nonetheless. In the coastal areas, particularly in the South, FI played a leading role in financing this surge. Although it also attracted domestic investment, the constraints on local financial resource is not so severe. Moreover, since the export-oriented economy generated many business trips by foreign and Chinese businessmen, there was no serious shortage of demand.

The situation in other parts of China is quite different. Little foreign capital was there to finance this construction. Most seriously, the largely closed local economy could provide little demand for these facilities.

¹ SSB, *FDSN, op. cit.*, p. 357.
Subsequently, Chinese officials have taken up much of the services, and generate strong resentment among the ordinary people. In fact, the central government attempted to control this surge from 1985, but with limited success. So by 1988, the government was forced literally to ban any more such constructions.

What seems to be true is therefore not only that the accumulation rate has dropped but also that accumulation has been utilized unproductively. Although it can not be legitimately claimed as the sole consequence of the open policy, the latter at least contributed to it. Fortunately, however, thanks to the governmental policy shift to emphasize FI in manufacturing and other productive activities, the trend in both of the aspects was largely reversed after 1985.

There are also available national statistics on the amount of utilized FI that were used in FAI for various years, which provide valuable information, since they implicitly contain the information about what percentage of FI has been utilized in FAI each year. If this percentage can be calculated for each year, by allowing for certain assumptions, it becomes always possible to tell what is the amount of FI which is used in FAI in certain industry or region, given the amount of utilized FI. This will be very useful in subsequent discussions.

Column A and B in table 8.3 has been adapted from Chinese official statistics. The difference between these two sets of data is: data in column A are measured by American dollar, while the data in Column B are measured by Chinese Reminbi. Apparently, if all FI were used in FAI, then the following must be true: B=A*ER, where ER stands for exchange rate, because it simply states that the amount of UFI in FAI in Chinese yuan equals to the product of its US dollar equivalent multiplied by exchange rate.

Thus the value of ER*R can be calculated for each year, which is shown in Column C. By comparing Column C with Column D, however, it can be

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1. The implication of ER*R is as follows: it is the rate which relates the amount of total UFI in US dollars to the amount of total FI in FAI in Chinese yuan. In other words, if total inflow of FI is known for a area, by assuming the rate for the area is the same as for China as a whole (which means two things: one, the propensity of foreign investment in the area to be used in
seen that not all FI were utilized in FAI, because if this is not the case, the figures in Column C should at least equal to the figures in Column D, while in fact, in a number of years, figures in Column C are smaller than those in Column D.

Table 8.3. The relationship between utilized FI and total FAI (annual flow), 1981-1988

<table>
<thead>
<tr>
<th>Year</th>
<th>UFI (US$ b)</th>
<th>FIFA (RMB b)</th>
<th>Implied ER*R</th>
<th>ER0</th>
<th>R (RMB/US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982</td>
<td>2.94</td>
<td>6.1</td>
<td>2.51</td>
<td>1.89</td>
<td>1.33</td>
</tr>
<tr>
<td>1983</td>
<td>1.98</td>
<td>6.7</td>
<td>3.38</td>
<td>1.98</td>
<td>1.71</td>
</tr>
<tr>
<td>1984</td>
<td>2.71</td>
<td>7.1</td>
<td>2.63</td>
<td>2.32</td>
<td>1.13</td>
</tr>
<tr>
<td>1985</td>
<td>4.65</td>
<td>9.1</td>
<td>1.96</td>
<td>2.94</td>
<td>0.67</td>
</tr>
<tr>
<td>1986</td>
<td>7.26</td>
<td>13.2</td>
<td>1.82</td>
<td>3.45</td>
<td>0.53</td>
</tr>
<tr>
<td>1987</td>
<td>8.45</td>
<td>17.5</td>
<td>2.07</td>
<td>3.72</td>
<td>0.56</td>
</tr>
<tr>
<td>1988</td>
<td>9.85*</td>
<td>25.5</td>
<td>2.66</td>
<td>3.72</td>
<td>0.72</td>
</tr>
</tbody>
</table>

Note:
UFI: utilized foreign investment, including both direct and indirect investment;
FIFA: utilized foreign investment in China's total annual fixed asset;
ER: exchange rate.
ER0: official exchange rate.
R: ratio of foreign investment in fixed asset investment to its total.
* The total UFI in 1988 was US$ 10.23 billion. It is now adjusted to match the figure of FIFA in 1988, because in the original FIFA data, the three SEZs in Guangdong were excluded. In 1988, the total UFI in these SEZs was US$650 million.

Removing the assumption, the relationship between Column B and Column A may be restated as the follows: B=A*C=A*ER*R, where R stands for the ratio of foreign investment in fixed asset investment to its total.

fixed asset investment is the same as foreign investment nationwide; second, the same kind of exchange rate is used in statistical practice.), it is always possible to estimate its equivalent investment in fixed asset in Chinese yuan, although the accuracy of the estimate depends on to what extent the assumption is valid.

ratio of FI invested in fixed asset to total UFI. By definition, R can not be larger than unity. In order to derive R from Column C, the value of ER must be in turn be determined. Interestingly, a comparison between the data in Column C and Column D indicates that the SSB did not employ the OER to convert the amount of UFI in US dollar into the amount in Chinese currency. This is because, if this is not the case, the figure in Column C should be not larger than those in Column D, since R is always smaller than unity.

To start with, let us assume the OER was used in the calculation of the official statistics. The value of R can then be calculated, which is shown in Column E. The tendency is a declining value of R, although there is sign of improvement in 1988. That means that the ratio of foreign capital invested in fixed asset to total foreign capital inflow has lessened.

But Column E needs further modification. This is because, under the present assumption about the exchange rate, an R value larger than unity appears in 1983 and 1984. It suggests that the assumed exchange rate has been overstated. In another words, the exchange rate that has been employed by the State Statistical Bureau to calculate the RMB amount of foreign investment in fixed investment is a rate lower than official exchange rate. For instance, the exchange rate used for 1983 has to be at least 1.71 times lower than the official exchange rate.

If it is assumed that the exchange rate used to calculate Column B from Column A is 1.5 times lower than the official exchange rate for various years (which still does not fully account for the difference between official and free market exchange rates until the devaluation at the end of 1989.), the R value in Column E has to be halved. That means that, for instance, in 1988, only 36 per cent of the utilized FI was actually employed in China’s FAI.

8.2. FI’s Impact on China’s Capital Distribution: Regional, Industrial and Sectorial Differentials

Characteristically, the contribution of foreign capital to capital formation in various regions, industries and sectors varies significantly. First, let us
look at the regional differentials by focusing on Guangdong province as an extreme example.

Unlike the national statistics, the provincial statistics do not provide information on the overall share of FI in Guangdong's FAI. Only FI's contribution to FAI in Guangdong's state-owned sector is given (see table 8.4).

It indicates that, during 1983 to 1988, FI had contributed to the FAI in Guangdong's state-owned sector by 14.2 per cent. Assuming that the propensity of DFI to be employed in FAI is the same as total FI, the average contribution of DFI can be put at 7.2%.

Table 8.4. The share of FI in FAI in Guangdong's state-owned sector (%) 1

<table>
<thead>
<tr>
<th>Year</th>
<th>83</th>
<th>84</th>
<th>85</th>
<th>86</th>
<th>87</th>
<th>88</th>
<th>83-88</th>
</tr>
</thead>
<tbody>
<tr>
<td>FI's share</td>
<td>11.1</td>
<td>12.4</td>
<td>13.1</td>
<td>17.2</td>
<td>15.5</td>
<td>15.6</td>
<td>14.2</td>
</tr>
<tr>
<td>DFI/FI(%)</td>
<td>61</td>
<td>84</td>
<td>56</td>
<td>45</td>
<td>49</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>DFI's share</td>
<td>6.8</td>
<td>10.4</td>
<td>7.3</td>
<td>7.7</td>
<td>7.6</td>
<td>5.9</td>
<td>7.2</td>
</tr>
</tbody>
</table>

As far as FI's contribution to Guangdong's total FAI is concerned, there is no available data. By utilizing the data in Column C in table 8.3, however, it is possible to estimate these figures, if assuming that the propensity of FI to be used in FAI in Guangdong was the same as the national average. The details of this estimation is contained in the following section, where it is a by-product of some other analysis. In short, it is estimated that FI contributed 13.8 per cent of total FAI in Guangdong during 1982 to 1989, which is three times as high as the national contribution figure.

---

Table 8.5. Estimated Share of FI in total FAI
in various localities in Guangdong, 1988

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Munici-palities (cities)</td>
<td>TFAI (RMB100m)</td>
<td>UFI (US$ m)</td>
<td>Converted FIFA* (RMB 100m)</td>
<td>FI’s estimated share of TFAI (%)</td>
</tr>
<tr>
<td>Guangzhou</td>
<td>73.2</td>
<td>255</td>
<td>6.99</td>
<td>10.5</td>
</tr>
<tr>
<td>Shenzhen</td>
<td>44.0</td>
<td>444</td>
<td>12.16</td>
<td>27.6</td>
</tr>
<tr>
<td>Zhuhai</td>
<td>11.3</td>
<td>218</td>
<td>5.97</td>
<td>52.8</td>
</tr>
<tr>
<td>Shantou</td>
<td>27.1</td>
<td>104</td>
<td>2.84</td>
<td>10.5</td>
</tr>
<tr>
<td>Fushan</td>
<td>23.0</td>
<td>148</td>
<td>4.06</td>
<td>17.7</td>
</tr>
<tr>
<td>Jiangmen</td>
<td>18.2</td>
<td>103</td>
<td>2.82</td>
<td>15.5</td>
</tr>
<tr>
<td>Zhanjiang</td>
<td>14.9</td>
<td>40</td>
<td>1.10</td>
<td>7.4</td>
</tr>
<tr>
<td>Zhouqin</td>
<td>11.6</td>
<td>54</td>
<td>1.48</td>
<td>12.8</td>
</tr>
<tr>
<td>Maoming</td>
<td>7.3</td>
<td>10</td>
<td>0.27</td>
<td>3.7</td>
</tr>
<tr>
<td>Huizhou</td>
<td>5.2</td>
<td>52</td>
<td>1.42</td>
<td>27.3</td>
</tr>
<tr>
<td>Zhengshan</td>
<td>6.1</td>
<td>28</td>
<td>0.77</td>
<td>12.6</td>
</tr>
<tr>
<td>Dongguan</td>
<td>4.2</td>
<td>67</td>
<td>1.84</td>
<td>43.8</td>
</tr>
<tr>
<td>Qingyuan</td>
<td>4.3</td>
<td>6</td>
<td>0.02</td>
<td>0.5</td>
</tr>
<tr>
<td>Yangjiang</td>
<td>4.0</td>
<td>4</td>
<td>0.01</td>
<td>0.3</td>
</tr>
<tr>
<td>Shanxi</td>
<td>1.9</td>
<td>5</td>
<td>0.01</td>
<td>0.7</td>
</tr>
<tr>
<td>Shaoguan</td>
<td>10.3</td>
<td>19</td>
<td>0.05</td>
<td>0.5</td>
</tr>
<tr>
<td>Heyuan</td>
<td>2.1</td>
<td>7</td>
<td>0.02</td>
<td>1.0</td>
</tr>
<tr>
<td>Meizhou</td>
<td>7.0</td>
<td>13</td>
<td>0.04</td>
<td>0.6</td>
</tr>
<tr>
<td>Province-administered</td>
<td>17.6</td>
<td>386</td>
<td>10.58</td>
<td>60.1</td>
</tr>
</tbody>
</table>

Note:
TFAI: total fixed asset investment;
UFI: utilized foreign investment

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*: Column C is derived by multiplying Column B by a coefficient 2.66, adapted from Table 8.3. The underlying assumption is that the propensity for FI to be used in FAI in these localities is the same as the national average in 1988.

The intra-provincial differentials are however even more significant. Table 8.5 shows the estimated share of FI in FAI in various municipalities or cities in 1988 in Guangdong. The differentials are indeed striking. Besides Shenzhen and Zhuhai, which include SEZs and therefore it is natural that FI played a major role in their capital formation, a number of other municipalities or cities also received significant contributions from FI in their capital formation. For instance, foreign capital’s share in Dongguan city’s FAI in 1988 is estimated as high as 43.8 per cent. FI’s contribution to local FAI in a number of other municipalities or cities, such as Qingyuen, Yangjiang, is however almost negligible, less than one percent.

Second, FI has also distributed unevenly in various branches of the economy, although again data is absent. Based on the analysis result of the listed EJVs on the CAERFT, as has been mentioned in the last chapter, and the data in column C in table 8.3, however, it is possible to shed some light on the issue within a limited scope such as Guangdong province.

The impact has been two-fold: first, the DFI’s direct contribution to the capital formation in Guangdong’s industry has been significant. The following table shows that, during 1982 to 1988, FI has contributed 31.8 per cent of basic construction investment in Guangdong’s industry. In 1988, the share was as high as 50 per cent.

Second, the distribution of the DFI and its related domestic capital investment (ie., these in partnership with it) has made a major impact on changes in the structure of the economy. During 1979 to 1988, 59.2 per cent of total UFI was made in industry in Guangdong. In comparison, the share of industry of the general BCI was only 36.2 per cent during the same period. So the inflow of DFI has increased the share of manufacturing activities in the whole economy.

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1. GSB, GDJMHLTZ, P. 6.
2. GSB, GZQ. op.cit., p. 163.
Table 8.6. Foreign and general investment in industry in Guangdong

<table>
<thead>
<tr>
<th>Year</th>
<th>General BCI (RMB100m)</th>
<th>UFI (US$m)</th>
<th>ER<em>R</em>0.7</th>
<th>FIBC (RMB100m)</th>
<th>Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982</td>
<td>11.10</td>
<td>130.24</td>
<td>1.757</td>
<td>2.29</td>
<td>20.6</td>
</tr>
<tr>
<td>1983</td>
<td>9.90</td>
<td>197.49</td>
<td>2.366</td>
<td>4.67</td>
<td>47.2</td>
</tr>
<tr>
<td>1984</td>
<td>13.89</td>
<td>246.34</td>
<td>1.841</td>
<td>4.54</td>
<td>32.7</td>
</tr>
<tr>
<td>1985</td>
<td>25.67</td>
<td>570.12</td>
<td>1.372</td>
<td>7.82</td>
<td>30.5</td>
</tr>
<tr>
<td>1986</td>
<td>40.06</td>
<td>983.72</td>
<td>1.274</td>
<td>12.53</td>
<td>31.3</td>
</tr>
<tr>
<td>1987</td>
<td>47.30</td>
<td>845.69</td>
<td>1.449</td>
<td>12.25</td>
<td>25.9</td>
</tr>
<tr>
<td>1988</td>
<td>60.13</td>
<td>1618.62</td>
<td>1.862</td>
<td>30.14</td>
<td>50.12</td>
</tr>
<tr>
<td>82-88</td>
<td>233.12</td>
<td>74.24</td>
<td></td>
<td></td>
<td>31.8</td>
</tr>
</tbody>
</table>

Note:
BCI: basic construction investment;
UFI: utilized foreign investment;
FIBC: foreign investment in basic construction;
ER*R: see table 8.2;
"0.7" denotes the average ratio of BCI to total FAI. "General investment" refers to all investment (including foreign investment).

Within the manufacturing industry, the inflow of DFI has greatly enhanced the development of a number of key newer branches (see table 8.7). For instance, the share of each of the five subdivision of division 38 (fabricated metal products, machinery and equipment) in the total investment in the listed EJVs outweighs each of its counter parties in the general investment structure. The difference between these two is especially great in the division 383 (electrical machinery apparatus, appliances and supplies), 384 (transport equipment) and 385 (professional and scientific and measuring and controlling equipment, etc.). On the other hand, however, as has been suggested by Thomas Chan, there has been little linkage development between these newly-established industries, largely depending on foreign

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1. Ibid., p. 153; GDJMHLTZ:1987, p.3.
capital, technology and imported materials, and the old industrial foundation, and to an even lesser extent to agricultural sector.¹

Table 8.7 Listed EJVs and general investment (%), 1979 to 1987

<table>
<thead>
<tr>
<th>ISIC</th>
<th>EJVs investment</th>
<th>General investment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Foreign Chinese total</td>
<td>1984</td>
</tr>
<tr>
<td>3</td>
<td>100 100 100</td>
<td>100</td>
</tr>
<tr>
<td>311-312</td>
<td>5.2 5.9 5.7</td>
<td>14.5</td>
</tr>
<tr>
<td>313</td>
<td>3.3 3.2 3.3</td>
<td>3.4</td>
</tr>
<tr>
<td>314</td>
<td>0 0 0</td>
<td>1.0</td>
</tr>
<tr>
<td>321</td>
<td>11.6 10.7 11.1</td>
<td>11.7</td>
</tr>
<tr>
<td>322</td>
<td>2.5 2.1 2.2</td>
<td>0.1</td>
</tr>
<tr>
<td>323</td>
<td>1.1 1.1 1.1</td>
<td>0.2</td>
</tr>
<tr>
<td>324</td>
<td>0.3 0.4 0.3</td>
<td>na</td>
</tr>
<tr>
<td>331</td>
<td>1.2 0.9 1.0</td>
<td>1.4</td>
</tr>
<tr>
<td>332</td>
<td>0.8 1.2 1.0</td>
<td>0.1</td>
</tr>
<tr>
<td>341</td>
<td>2.4 1.8 2.0</td>
<td>1.4</td>
</tr>
<tr>
<td>342</td>
<td>0.2 0.03 0.1</td>
<td>na</td>
</tr>
<tr>
<td>351</td>
<td>1.0 2.7 2.3</td>
<td>4.6</td>
</tr>
<tr>
<td>352</td>
<td>2.8 2.9 2.9</td>
<td>1.8</td>
</tr>
<tr>
<td>353</td>
<td>0 0 0</td>
<td>4.4</td>
</tr>
<tr>
<td>354</td>
<td>0.7 0.5 0.6</td>
<td>na</td>
</tr>
<tr>
<td>355</td>
<td>2.0 1.7 1.8</td>
<td>1.9</td>
</tr>
<tr>
<td>356</td>
<td>5.1 5.5 5.4</td>
<td>1.0</td>
</tr>
<tr>
<td>361</td>
<td>0 0 0</td>
<td>na</td>
</tr>
<tr>
<td>362</td>
<td>1.4 1.4 1.4</td>
<td>0.3</td>
</tr>
<tr>
<td>369</td>
<td>5.4 3.6 4.3</td>
<td>10.5</td>
</tr>
<tr>
<td>371</td>
<td>0.1 0.1 0.1</td>
<td>2.5</td>
</tr>
<tr>
<td>372</td>
<td>0.1 0.2 0.2</td>
<td>2.0</td>
</tr>
<tr>
<td>381</td>
<td>9.3 8.3 8.7</td>
<td>4.9</td>
</tr>
<tr>
<td>382</td>
<td>5.4 7.1 6.5</td>
<td>4.8</td>
</tr>
<tr>
<td>383</td>
<td>23.1 24.9 24.2</td>
<td>9.1</td>
</tr>
<tr>
<td>384</td>
<td>7.4 8.4 8.0</td>
<td>1.8</td>
</tr>
<tr>
<td>385</td>
<td>3.1 2.6 2.8</td>
<td>na</td>
</tr>
<tr>
<td>390</td>
<td>3.7 2.6 3.0</td>
<td>na</td>
</tr>
</tbody>
</table>

1. for column 1-4, see Appendix 8, column 5-7, see GTN, various issues.
Third, FI's impact on the economy is also unevenly distributed by sectors of economy, i.e., state-owned, collective (particularly rural collective) and private. But information on this issue is both scarce and crude.

The authoritative *China Statistics Yearbook* gives the following distribution of FI in the FAI of China's three sectors:

Table 8.8. Sectorial distribution of UFI in FAI in China, 1988

<table>
<thead>
<tr>
<th>Category</th>
<th>Total FIFA (RMB100m)</th>
<th>FIFA's share in TFAI (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>254.51</td>
<td>5.7</td>
</tr>
<tr>
<td>State-owned sector</td>
<td>243.18</td>
<td>9.0</td>
</tr>
<tr>
<td>of which:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic construction</td>
<td>211.58</td>
<td>13.9</td>
</tr>
<tr>
<td>Technical renovation</td>
<td>25.98</td>
<td>2.7</td>
</tr>
<tr>
<td>others</td>
<td>5.62</td>
<td>2.7</td>
</tr>
<tr>
<td>Collective sector</td>
<td>11.33</td>
<td>1.6</td>
</tr>
<tr>
<td>of which:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rural</td>
<td>0.00</td>
<td>0.0</td>
</tr>
</tbody>
</table>

These data show that the absorption of FI in state-owned sector is much higher than collectively-owned sector: in the former, FI accounts for 9.0 per cent of total FAI, while in the latter, it accounts for only 1.6 per cent. The difference is 5.6 times.

But these data might be not reliable. If the above data were true, it would mean that FI in the collective sector had to be at least 20 times smaller than in state-owned sector, because FAI in the state-owned sector was almost four times as big as collective sector. Given that DFI accounted for over one-fifth of total UFI, it follows that, even if all the foreign loans went into state-owned sector (which is an extremely generous assumption), in order to produce this 20 times' difference, DFI in state-owned enterprises had to be at least 4 times as big as in collective sector.

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At any rate, the situation in Guangdong seems to be a considerable deviation from the national one. According to my survey in Guangdong in early 1990, 60 per cent of the FIEs in Zhongshan city were located in various townships. The same situation is also true in Dongguan where out of some 600 FIEs, only 200 were located in the city proper, the rest are situated in dozens of townships. Given that economic activities in townships are almost completely collective-owned, it therefore must be the case that DFI in the collective sector in these areas must be not significantly smaller than in state-owned sector. Indeed, Guangdong's provincial statistics shows that this is true for the entire province.

In 1988, the 19 cities of Guangdong, which produced 61.2 per cent of Guangdong's total gross industrial output and made 68.9 per cent of FAI in the province's state-owned sector, received only 54.4 per cent of Guangdong's total UFI.¹ So FI in the state-owned sector is actually smaller than collective sector in Guangdong.

It may be interesting to note that the foreign investors in Guangdong seemed not to care about the ownership type of their Chinese partners. One question included in the questionnaire is whether the foreign investors had any preference for the ownership type of their Chinese partners' ownership type. Out of 21 response, 17( including the three non-HK based firms) indicated no preference, while 4 said 'yes': 2 preferred state-owned enterprises, and two rural township enterprises. So the reasons for this skewed distribution of DFI in favour of non state-owned sector in Guangdong probably lie with the Chinese side.

Consequently, the inflow of DFI (and other forms of FI) and its distribution in Guangdong has also changed the latter's economic structure. Provincial data is however not available. Table 8.9 shows the changes in Dongguan city's ownership structure, measured by share of the total industrial output value of the city.

Although the city is unique in the sense that the share of state ownership in its industry had always been very low ( even in 1979, its share was only

¹. GSB, GTN :1989.
40.7 per cent), the trend is typical, that is to say, state ownership declined, collective ownership and Sino-foreign ownership increased.

<table>
<thead>
<tr>
<th>Sectors</th>
<th>1979</th>
<th>1985</th>
<th>1987</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>State ownership</td>
<td>40.70</td>
<td>17.4</td>
<td>11.3</td>
</tr>
<tr>
<td>Collective ownership</td>
<td>59.30</td>
<td>74.8</td>
<td>74.9</td>
</tr>
<tr>
<td>Other ownership*</td>
<td>-</td>
<td>4.6</td>
<td>9.3</td>
</tr>
<tr>
<td>Individual ownership</td>
<td>-</td>
<td>3.2</td>
<td>4.5</td>
</tr>
</tbody>
</table>

*: This mainly includes FIEs, although joint operations between state-owned and collectively-owned enterprises are also usually included in this group.

It should be pointed out however that the rise of collective ownership in different Chinese locations often have different causes, although the economic reform and the subsequent relaxation over collective ownership provided the overall favourable condition. As far as Dongguan is concerned, it owes more to the shan-lei-yi-bu business brought in by Hong Kong businessmen than the inflow of DFI.

8.3. The Policy's Impact on Inter-regional Flow of Capital and Other Resources in China

8.3.1. Capital Flow

What is more significant but also more difficult to determine is the policy's impact on domestic capital flows. This impact is manifested in two forms. The first is the central government's investment in infrastructure in the SEZs and the open cities and economic open coastal areas. It is reported, for instance, that, an cumulative amount of RMB 2 billion has been

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invested in the 15 ETDZs in the 14 open cities during the five years starting in 1985 (during the same period, a total of 615 EJVs have been established in these zones, with a total amount of FI of US$1,060 million.). There are however no official statistics on this and therefore it is difficult to proceed any further, although it should be pointed out that, from this piece of information, the undertaking of these ETDZs as an venue to attract DFI does seems to be a very expensive one in the short-run.

The second one is inter-provincial flows of capital, that is, capital flow between different provinces. This is a relatively new economic phenomenon in China, resulting from the economic reform and open-door policy. In the past, the central government used to be the sole source of allocation of national resources. Provinces did not invest in each other. But in the past decade, this has been dramatically changed. The underlying conditions for this phenomenon is the speedy growth of revenues retained by local governments and individual enterprises as a result of the economic reform. Whereas the region-biased open policy provided the impetus for such flow by creating an artificially favourable conditions in the coastal, particularly the southern coastal, areas.

One of the principal mechanisms for this is the expansion of bank loans in Guangdong. In principle, as indicated by Vogel (op. cit., p. 115), starting from 1980, banks in Guangdong have been allowed to link lending to deposits and expand loans accordingly. But in reality there has been a considerable gap between the loans and deposits, financed by capital inflow from other provinces.

Unfortunately, however, the available statistics do not permit the separation of these two forms. What can possibly be done is to examine the aggregate characteristics of domestic capital flows. Table 8.10. presents a detailed inspection of Guangdong's income accounts and its general FAI account. It shows that Guangdong financed an increasingly smaller part of the its total FAI, about 66 per cent by the end of the period.

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1. Hong Kong, Xinbao, 2 February, 1990, p. 7. It is not specified whether the amount of foreign investment is utilized one or committed one. Also it seems that the use of another term, ie. equity joint ventures, has been mislead. What is meant is probably all foreign investment enterprises.
Table 8.10. The Financing of Guangdong’s FAI¹

<table>
<thead>
<tr>
<th>Year</th>
<th>TFAI Amount</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>78</td>
<td>27.2</td>
<td>96.0</td>
<td>n.a</td>
<td>n.a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>79</td>
<td>28.3</td>
<td>96.3</td>
<td>n.a</td>
<td>n.a</td>
<td></td>
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<tr>
<td>80</td>
<td>38.3</td>
<td>95.1</td>
<td>n.a</td>
<td>n.a</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>81</td>
<td>60.4</td>
<td>78.5</td>
<td>n.a</td>
<td>n.a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>82</td>
<td>84.7</td>
<td>80.7</td>
<td>7.05</td>
<td>8.3</td>
<td>11.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>83</td>
<td>88.7</td>
<td>81.6</td>
<td>13.76</td>
<td>15.5</td>
<td>5.34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>84</td>
<td>130.4</td>
<td>73.5</td>
<td>16.94</td>
<td>13.0</td>
<td>21.26</td>
<td></td>
<td></td>
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<tr>
<td>85</td>
<td>184.6</td>
<td>66.0</td>
<td>18.01</td>
<td>9.8</td>
<td>49.29</td>
<td></td>
<td></td>
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<tr>
<td>86</td>
<td>206.5</td>
<td>67.9</td>
<td>29.99</td>
<td>12.6</td>
<td>41.71</td>
<td></td>
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</tr>
<tr>
<td>87</td>
<td>234.7</td>
<td>66.1</td>
<td>25.19</td>
<td>10.7</td>
<td>60.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>88</td>
<td>331.6</td>
<td>66.5</td>
<td>64.90</td>
<td>19.6</td>
<td>54.9</td>
<td></td>
<td></td>
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</tbody>
</table>

82-88

<table>
<thead>
<tr>
<th>1261.2</th>
<th>874.4</th>
<th>175.84</th>
<th>210.96</th>
</tr>
</thead>
<tbody>
<tr>
<td>% 100</td>
<td>69.3</td>
<td>13.9</td>
<td>16.7</td>
</tr>
</tbody>
</table>

Note:
TFAI: total fixed asset investment of the province at current prices
AFAI: the province's own accumulation used in fixed asset investment, derived from multiplying one of the two components in total provincial income (the other is consumption), classified as "accumulation" by 104 per cent. This is because, according to Guo, the difference between the value of FAI and AFAI is determined by an accounting ratio of about 4 per cent.²
FIFA: foreign investment used in fixed asset

How was the rest of FAI financed? Two major forms of finance can be suggested, namely, FI and investment from other provinces. Since the data

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¹. GSB, GZQ, 1989.
on FI in Guangdong's FAI are not available, it has to be estimated from other sources. Column E represents such an estimate, derived from multiplying Guangdong's annual figure of UFI by the figures in Column C of table 8.3. Thus it is assumed that the propensity for FI to be employed in FAI in Guangdong was the same as the national average.

It is then easy to calculate that during 1982 to 1988, FI financed 13.9 per cent of Guangdong's total FAI. But that still leaves a significant portion of the investments for various years the source of which has not been identified. This residual is presented in Column F. It accounts for 16.7 per cent of Guangdong's total FAI during 1982 to 1988.

Could it be that inter-provincial capital inflows financed this residual? The only other possible sources are remittances and donations of overseas Chinese to the province. According to official statistics, the total amount of donations by overseas Chinese to the province during 1982 to 1988 amounted to RMB4,067 million. Even assuming all this amount was used on fixed asset investment, which is very unlikely, it would still account for less than 3.2 per cent of the residual 16.7 per cent.

As far as remittances alone are concerned, data is only available for 1988, when it amounted to US$34.47 million. This is a relatively small amount compared to Guangdong's annual FAI. It is also understandable that remittances could not be expected to be largely employed in fixed asset investment.

Therefore, during 1982 to 1988, while FI contributed approximately 13.9 per cent to Guangdong's FAI, an equally substantial inflow of capital - at least 13.5 per cent of the total, after allowing for overseas Chinese donation, had come from other provinces. This is partly confirmed by a report that, during the sixth Five-Year Plan period (ie., 1981-85), the gap between savings and investment in Guangdong was as large as 24.3 per cent and funded from other provinces in the forms of bank loan to finance FAI amounting to RMB30,000 million; whereas the utilized foreign capital

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contributed 13.8 per cent of the fund needed to finance Guangdong’s total FAI.¹

What is significant is that the case of Guangdong is neither accidental nor alone. Indeed, under the regional strategy of the open policy, the past decade has seen a systematic capital flow away from inland to coastal areas, from the North to the South. During this process, the biggest gainers have been Guangdong and Fujian provinces. Table 8.11 shows that the trend started in the fifth Five-year Plan period, ie.,1976 to 1980, but was accentuated in the sixth Five-year Plan period, ie., 1981-1985. The result is that more and more investment is concentrated in fewer coastal provinces. The only exception are Shanxi, Inner Mongolia and Helongjiang in the North, Jiangxi in the central area and Tibet in the west (see Map I). The first four regions are related to major investment projects in coal mining and non-ferrous ore mining, whereas the case of Tibet can probably be better understood in political terms, and anyway, it is economically insignificant.

Table 8.11. Losers and Gainers in basic construction investment: changed share in national total²

<table>
<thead>
<tr>
<th>Area</th>
<th>No. of Provinces</th>
<th>1976-80 compared with 1971-75</th>
<th>1981-85 compared with 1976-80</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of MUs or ARs</td>
<td>Lose</td>
<td>gain</td>
</tr>
<tr>
<td>Coastal</td>
<td>11</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Central</td>
<td>9</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Western</td>
<td>9</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>


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Furthermore, there is evidence that there is also a sizable intra-provincial flow from the less developed regions to more developed ones. For instance, Thomas Chan mentioned that the gap between loans and deposits was more 100 per cent during 1984 to 1986 in Foshan.¹

Significantly, the inter- and intra-provincial flow of capital has been associated with the flow of other resources in the same direction, including both human and material resources.

8.3.2. Labour Flow

There has been a massive inter- and intra-regional flow of labour in Guangdong in the last decade. There are a number of causes for this. First, as the consequence of rapid industrial development in PRDEOA, both labour cost and supplies of labour has been constrained. The attraction derived from the relatively high pay and the opportunity in working in industrial area and therefore living in urban areas for previously agricultural employees are great; second, there has been relaxation of population control in the national and provincial policy; third, investors tend to bring in their own workforce when they come to invest in the PRDEOA, which is most evident in Shenzhen where, in the middle of a Cantonese world, visitors would find that most of the population speak Mandarin.

There are however no official statistics available. The most accurate information so far is perhaps from a questionnaire survey, conducted by Hong Kong Trade Development Council between late 1989 and early 1990. Questionnaires were sent to all the local governments in Guangdong. By April 1990, over 70 replies were obtained. The respondents that provided information in the section connected to "outside workers" (including workers from inside and outside the province) covered 9 cities (47.4 per cent) and 45 counties (47.9 per cent) in the province, where the total number of "outside workers" were put at about 2 millions². In other

¹ Thomas M.H. Chan, op. cit., p. 21.
² The cities where information is not available include: Guangzhou, Shantou, Shaoguan, Heyuan, Shanwi, Zhongshan, Jiangmen, Zhanjiang, Maomin, Zhouqin.
words, the estimated total number of "outside workers" in different localities in Guangdong was about 4 millions.

As far as the composition of the flow is concerned, evidence is available only on individual basis. For instance, according to Dongguan City Labour Service Corporation, the total number of outside workers in the city (including constituent townships) at April 1988 was 320,000, of which 71.32 per cent came from other parts of the province, while 28.67 per cent from outside the province; male workers accounted for 40 per cent, while the rest was made up by women; the most populous group was unmarried women at the ages between 17 and 22; the distribution by education level was as follows: graduates of primary school 22.25 per cent, graduates of junior middle school 62.5 per cent, graduates of technical schools 0.23 per cent.1

It would be wrong however to suggest that all the flow of labour is directly related with DFI. Indeed, the above-mentioned source also reveals that, in Dongguan, 61.12 per cent of the "outside workers" were employed in shan lei-yi-bu factories. The rest distribution is as follows: other factories: 7.31 per cent; construction: 11.87 per cent; quarrying and tiles- and brick-making: 7.13 per cent; commerce and service: 2.33 per cent; agriculture: 4.71 per cent; others: 5 per cent. (ibid., p. 95). That means that the most important employers for outside workers are not FIEs.2

Nonetheless, there is evidence suggesting that the role of FIEs in the inducement of this flow is significant, even we confine only to its direct impact. According to the Guangdong Statistical Yearbook, in 1988, total employment in various kinds of FIEs was 246,600 persons.3 But the Guangdong Statistics of External Economic Relationship, Foreign Trade and Tourism reveals otherwise: by the end of 1988, 943,474 persons were employed in the 7377 registered FIEs.

It seems that this great discrepancy is caused by the fact that a large number of employees in Guangdong’s FIEs are from outside the province,

1. The Investigation Group of the Central Committee of the CCP, op. cit., pp. 94-95.
2. Cautions are needed in generalization: Dongguan city is where San-lei-yi-bu business is most prominent in Guangdong.
therefore excluded from the general employment statistics of the province, but included in the statistics specializing in aspects such as FIEs. If this is the case, the discrepancy suggests that over 696,000 employees in Guangdong FIEs, that is, 73 per cent of the total employees, had come from the rest of China.

8.3.3 Flow of Other Production Inputs

The rapid growth of manufacturing activities in the PRDEOA has also pulled other production resources from other areas, both inside and outside Guangdong. Information on this is however extremely difficult to find. Various accounts have pointed to the fact, for example, that, utilizing its special policy status, Guangdong's foreign trade corporations (FTCs) draw on produce of other provinces to export and consequently was able to accumulate a large sum of foreign exchange reserve.

As part of the "special policy and flexible measures" package that the central government granted to Guangdong, Guangdong province was allowed to retain 70 per cent of the export earnings above the 1978 export level (US$1.4 billion) during 1980 to 1984, while other provinces (except Fujian) were entitled to retain only 30 per cent for centrally managed goods and 40 per cent locally managed goods, on two conditions: one, export procurement targets were met, two, applied only to hard currency earnings arising from the sale of goods beyond the planned amount.1

As a result, the FTCs in Guangdong had a cutting edge over FTCs in other provinces and were able to offer higher procurement prices to producers all over the country. The value of goods exported by Guangdong but produced outside was usually unknown. But in 1980 the value amounted to more than 700 million yuan (ie.,16.3 per cent of total domestic procurement).2

Indeed, there is evidence suggesting that Guangdong draws heavily on domestic resources for material inputs and market demand. An extreme example is perhaps the Hainan car scandal of 1984, when authorities in

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2. Ibid., p. 352.
Hainan Island, then still under the jurisdiction of Guangdong province, purchased US$570 million in foreign exchange from units in twenty-one provinces at market prices and imported eighty-nine thousand vehicles and large quantities of consumer goods and resold them to other provinces.¹

8.4. Conclusion

In relationship to the policy’s first macro-economic objective, that is to expand China’s capital formation by absorbing foreign capital through DFI, this chapter examines both the direct and indirect impact that the policy has had on China’s capital formation, and other related effects.

It concludes that, as far as the national impact, that is, DFI’s direct contribution to China’s capital formation, is concerned, it has been insignificant: from 1981 to 1988, DFI contributed 1.62 per cent of China’s FAI.

The contribution to certain industries or regions is nonetheless considerable: in Guangdong province, DFI contributed 7.2 per cent to total FAI in the state-owned sector during 1983 to 1988; the contribution in collective sector is even more significant. In some localities in Guangdong, such as Dongguan and Huizhou, DFI had become the major capital source, contributing one-third to one-half of total FAI by the late 1980s.

DFI has also made a significant contribution to the changes in Guangdong’s industrial structure that have taken place in the 1980s: an estimated 31.8 per cent of investment in industry during 1982 to 1988 came from DFI. Furthermore, the share of DFI in certain key branches of manufacturing industry (such as the manufacture of electrical machinery apparatus, appliances and supplies and the manufacture of transport equipment) is three to four times higher than the share of general investment in these branches.

DFI’s indirect impact on China’s capital formation is less clear. From limited available information, it seems to be the case that the policy has been associated with declines in both accumulation rate (in relation to total national income) and the share of productive accumulation.

¹. Ibid., p.368.
The most significant indirect impact that the policy has generated is however on the inter-provincial and intra-provincial flow of capital, workforce and other resources, related to the regional strategy which favours the coastal areas. There has been a massive flow of domestic resources from inland areas to more developed coastal areas, which to a great extent, outweighed the flow in the other direction.

One of the arguments for such a regional strategy was to achieve economic efficiency by concentrating resources in the economically more efficient coastal area. In order to evaluate the effectiveness of this policy, it is thus important to investigate whether this flow has improved allocative efficiency. Furthermore, the policy also has a number of other objectives. These will be discussed in the next chapter.
In addition to the expansion of China's capital formation, the policy was also intended to result in increases in Chinese exports, improvement in efficiency and ultimately accelerated economic growth. This chapter will examine the relevant evidence on these matters to determine to what extent these objectives have been achieved, and involving what costs.

9.1. Export

9.1.1. The growth of China's Exports

China's performance in exports during the 1980s merits much admiration: its exports increased steadily from US$18,270 million to US$47,540 million from 1980 to 1988, a rate of growth of 12.7 per cent per annum on average (at current prices). The growth was greatly accelerated after 1985: during 1985 to 1988, China's exports grew by 21.3 per cent annually.

The growth of Chinese exports owes much to the speedy growth of its manufactured exports. The latter grew at an annual rate of 19.9 per cent during 1980 to 1988. In particular, as shown in Chapter 3, manufactured exports grew by 37.4 per cent annually during 1985 to 1988. Subsequently, the share of the manufactured component in China's total merchandise exports rose to 73 per cent by 1988. It will be shown later that, as far as absolute value is concerned, FIEs have made a significant contribution to China's export growth.

An important factor in this growth has been the steady devaluation of the Chinese currency in relation to the US dollar. Graph 9.1 shows the regression line between China's export value, at current prices, and the official exchange rate. The high value of R-squared (DF=10, t-value=6.731, DW test=1.154) indicates a close connection between these two variables.
Before the 1970s, the exchange rate was kept constant, valued at RMB2.4618 yuan per US dollar throughout the period from 1959 to 1971. In the 1970s, however, the official exchange rate was raised gradually, reaching 1.4984 by 1980.

In the light of the new economic policy, a dual exchange rate system was introduced from January 1981. Under the system, there co-existed two exchange rates, one was the so-called Internal Settlement Rate (ISR), for merchandise transactions; the other was the ordinary exchange rate for other purposes. The underlying reasons were that, on the one hand, the general level of Chinese retail and service prices was very low compared to that of other countries, but on the other hand, Chinese products in the international market could not be competitive without employing a relatively low exchange rate. It was hoped that the introduction of such a system could help to eliminate the huge amount of subsidies that the State had to provide to support exports.

During 1981 to 1982, the ISR was fixed at RMB2.8 per US dollar. But in the following years, domestic procurement prices (DPP) of Chinese

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1. For source data, see Appendix 10.
exports continued to rise so that the ISR had to be revalued again. Furthermore, in the face of this ISR, Chinese foreign trading companies rushed to export products where the unit DPP was lower than the value of ISR. On the other hand, there were also external problems. Foreign trading partners accused China of unfair competition. The presence of such a system also impeded China’s effort to join the GATT. So the ISR was abolished on 1st January of 1985.

Since then, there have been successive devaluations (see above chart). The two latest devaluations were particularly close: one was made on 16 December 1989, by 21 per cent, whereas the other took effect on 19 November 1990, by 9.57 per cent.¹ After a series of micro-devaluations of the yuan starting in early 1991, the gap between the official exchange rate and the exchange rate in FEACs has been reduced to about 10 per cent by June 1991.² China is actually not very far from making its currency convertible. It has been announced that, from the 1st January 1991, Chinese exports would no longer enjoy subsidies from the central government.

In the meantime, however, there are also less comforting signs: China’s terms of trade suffered constant deterioration during 1982 to 1988 (except 1984), and only recovered slightly in 1989 by an estimated 1.8 per cent. Table 9.1 shows China’s export values and the changes in terms of trade. Noticeably, the deterioration was exacerbated after 1985. As a result, although China’s nominal earnings of foreign exchange have risen by 160 per cent during 1980 to 1988, its real earnings have increased by only 100 per cent.

The question is why China’s terms of trade have deteriorated. The reasons are not apparent, since, during the period, the terms of trade in the international economy generally deteriorated, with some fluctuation, for primary goods, but improved considerably for manufactured goods. Indeed, the price index of manufactured exports rose from 116 in 1980 to 144 in 1988.³ At the same time, China’s export composition moved

². London, The Economist, June 1, 1991, p. 18
constantly toward an improvement: its share of manufactured exports increased from 44.7 per cent in 1980 to 73 per cent in 1988.

Table 9.1. China's export and terms of trade

<table>
<thead>
<tr>
<th>Year</th>
<th>Export US$b</th>
<th>Share of manuf. exports</th>
<th>Terms of trade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>18.27</td>
<td>17.6</td>
<td>100</td>
</tr>
<tr>
<td>1981</td>
<td>22.01</td>
<td>7.2</td>
<td>107</td>
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<tr>
<td>1982</td>
<td>22.32</td>
<td>-1.7</td>
<td>105</td>
</tr>
<tr>
<td>1983</td>
<td>22.23</td>
<td>-3.3</td>
<td>102</td>
</tr>
<tr>
<td>1984</td>
<td>26.14</td>
<td>5.5</td>
<td>108</td>
</tr>
<tr>
<td>1985</td>
<td>27.35</td>
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<td>105</td>
</tr>
<tr>
<td>1986</td>
<td>30.94</td>
<td>-19.7</td>
<td>88</td>
</tr>
<tr>
<td>1987</td>
<td>39.44</td>
<td>-4.6</td>
<td>84</td>
</tr>
<tr>
<td>1988</td>
<td>47.54</td>
<td>-5.5</td>
<td>80</td>
</tr>
<tr>
<td>1989</td>
<td>59.28*</td>
<td>1.8</td>
<td>81</td>
</tr>
</tbody>
</table>

*: estimated figure.

9.1.2. Exports by FIEs

In Chinese national foreign trading statistics, exports and imports by FIEs are usually not separately reported. It is therefore not possible to depict the growth of their exports with certainty. The first academic effort to discover how much FIEs actually export seems to have been made in 1984. A questionnaire survey was conducted in Shenzhen in 1985, targeting the SEZ's EJVs. With 34 replies (45.3 per cent), the result shows that 55.9 per cent of the EJVs sold over half of their products in the Chinese domestic market.

The most detailed official information is provided by the Statistics of Guangdong's External Relationships, Foreign Trade and Tourism

1. SSB, FDSN, 1989, p.417;
an internal reference statistics book. The 1988 issue reports a survey of 261 FIEs in the province, including 134 EJVs, 122 CJVs and 5 WFOEs. It is unknown, however, in what proportion the manufacturing enterprises were represented.

Table 9.2. Export ratios of FIEs in Guangdong, 1988

<table>
<thead>
<tr>
<th>No. of FIEs</th>
<th>Sale Income (or turnover)</th>
<th>Foreign exchange earnings</th>
<th>Total ratio (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A (RMB 10,000)</td>
<td>B (US $ 10,000)</td>
<td>C</td>
</tr>
<tr>
<td>All</td>
<td>261</td>
<td>587709</td>
<td>57646</td>
</tr>
<tr>
<td>EJVs</td>
<td>134</td>
<td>446868</td>
<td>48770</td>
</tr>
<tr>
<td>CJVs</td>
<td>122</td>
<td>130076</td>
<td>7438</td>
</tr>
<tr>
<td>WFOEs</td>
<td>5</td>
<td>10765</td>
<td>1438</td>
</tr>
</tbody>
</table>

RI: derived from the following formula: \( R1 = 3.7221 \frac{C}{B} \), indicating the ratio of earnings from foreign trading to their total sales value.

R2: derived from \( R2 = 3.7221D/B \), representing the ratio of the total foreign earnings, from both trade and services, to the total sales value.

"3.7221" is the yearly average official exchange rate.

The data show that when the foreign exchange earnings are converted to value in Chinese yuan at official exchange rate, these FIEs' exports accounted for 39.7 per cent of their products (including both merchandise and service exports.). It should be pointed out, however, that, since the official exchange rate was over-valued by about 100 per cent in the year in question, the export ratios in real terms should be higher.

The above table seems also to suggest that WFOEs in Guangdong had the highest propensity to export, while the CJVs had the lowest propensity to export, and the EJVs go between.

In conjecture, it is helpful to recall that the results of the present FIEs survey, as reported in chapter 7, indicate that, by early 1990, 60 per cent of the FIEs exported half or more of their products. So it may be suggested that FIEs in the province have become increasingly export-oriented.

<table>
<thead>
<tr>
<th>Year</th>
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<th>B</th>
<th>C</th>
<th>D</th>
<th>A-C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>73.51</td>
<td>2.9</td>
<td>na</td>
<td>na</td>
<td>na</td>
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<tr>
<td>1985</td>
<td>222.65</td>
<td>7.34</td>
<td>336.56</td>
<td>11.96</td>
<td>-112.91</td>
</tr>
<tr>
<td>1986</td>
<td>388.84</td>
<td>9.06</td>
<td>847.51</td>
<td>32.28</td>
<td>-458.67</td>
</tr>
<tr>
<td>1987</td>
<td>611.89</td>
<td>11.01</td>
<td>801.28</td>
<td>21.70</td>
<td>-189.39</td>
</tr>
<tr>
<td>1988</td>
<td>1202.18</td>
<td>16.06</td>
<td>1127.72</td>
<td>22.07</td>
<td>74.46</td>
</tr>
<tr>
<td>1989*</td>
<td>2233.00</td>
<td>27.80</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
</tbody>
</table>

Table 9.3. Exports and imports by FIEs and their share in Guangdong's total1 (US$ billions, current prices)


In aggregate term, the value of FIEs exports has been growing at a very high speed in the last few years in China. It was US$1,421 million in 1987, US$2,416 million in 1988, US$4,920 million in 1989, and US$7,810 million in 1990.2 Subsequently, their share of China's total exports rose from 3.6 per cent in 1987, 5.1 per cent in 1988, 8.3 per cent in 1989, to

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12.6 per cent in 1990. The above data mean that the growth of exports by FIEs accounted for 22% of China's export growth between 1986 to 1990 (this refers to their direct contribution).

FIEs' exports are especially significant in Guangdong. In table 9.3, FIEs' shares in Guangdong's exports and imports are shown. It indicates that, in 1989, FIEs accounted for 27.8 per cent of Guangdong's total exports value. Admittedly, FIEs were also major importers. In 1988, their imports accounted for 22.1 per cent of Guangdong's total imports, while their exports made up only 16.1 per cent of Guangdong's total exports. But the exports were growing quickly, while imports were slowing down so that FIEs in Guangdong as a whole became a net foreign exchange earner in 1988. Indeed, the trend seems to continue: it was reported that, in the first five months of 1990, exports by FIEs in Guangdong increased by 98 per cent, compared with the same period of 1989.1

There is no doubt that FIEs had made a significant contribution to the fact that, after Guangdong had become China's largest exporter in 1986, its lead over other provinces (or municipalities) has been further widened. Guangdong's exports value increased from US$2,604 m in 1984 to US$7,486 m in 1988, while FIEs' exports rose from US$73.51 m to US$1,202 m during the same period. Thus the FIEs' exports had contributed 23.1 per cent of the growth of Guangdong's exports during the period. If we take the period from 1984 to 1989, the contribution was even bigger, as high as 41.7 per cent. This is because, due to the economic sanctions imposed on China by western countries following the Tiananmen Incident, China's domestic enterprises had a particularly bad year in foreign trading, but the FIEs' exports continued to grow. Between 1988 and 1989, Guangdong's total export value increased by US$294 m, while the exports of its FIEs increased by US$1,032 m. That is to say, during that period, the growth of FIEs' exports more than offset the decline of exports by Guangdong's domestic enterprises and maintained the province's export growth.2

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2. We cannot rule out the possibility, however, that, as chapter 7 suggests, some exports by domestic entities such as FIEs' Chinese parent companies, are exported in the name of FIEs to avoid governmental controls.
Do FIEs have a positive or negative impact on the exports of domestic enterprises? There is no available information on this matter. Presumably, if FIEs can provide better-quality inputs for export-oriented domestic enterprises, the latter's exports can be increased. But the scattered information gathered in the present FIEs survey, as reported in Chapter 7, suggest that this is a relatively rare case, because only a minority of FIEs produce semi-finished products, and when they do, their main customers tend to be other FIEs who produce final consumer goods, partly because these FIEs can pay for their procurement in foreign exchange. It is likely therefore that, as a factor supplier, FIEs have afforded little help to domestic enterprises in expanding their exports.

There are other factors:

First, it is widely recognized that FIEs enjoy much more freedom or privileges than domestic enterprises in handling exports and imports. Therefore they are probably more competitive than their Chinese counterparts in non-price aspects.

Second, it is also widely agreed that the markets for Chinese exports are severely restricted and are not very elastic. It follows that when the supply increases, the prices suffer to a greater extent. This is especially true in the case of Guangdong, exports of which depend on Hong Kong market (and re-exports from HK) by over 80 per cent.

These facts seems to prompt one to think that as a competitive producer of exports, FIEs may have a negative effect on the exports by domestic enterprises.

9.2. The Issue of Efficiency

One of the main objectives in encouraging DFI has been to improve efficiency. The stress however has been more on micro- than macro-efficiency. This is reflected in the fact that, in the three successive selections of Ten Best Equity Joint Ventures, the criteria were always dominated by micro-economic issues.
But in fact, the real issue here is macro-efficiency, because, as the analysis in the previous chapter pointed out that, under the regional strategy, the policy has been above all characterised by its conducive impact on the flow or re-distribution of both human and material resources between regional units. An important question to ask is whether this re-distribution of capital, labour and material resources is in favour of the economically most efficient provinces.

Moreover, the policy is supported by the argument that coastal areas are economically more efficient and the concentration of development in this area is therefore desirable to improve overall allocative efficiency.

To put simply, the principle of allocative efficiency requires that the allocation of commodities should be such that marginal rates of substitution are the same for all consumers and equal to the marginal rate of transformation, which should be the same for all producers.¹

In another words, to achieve improvement in allocation efficiency, the distribution of resources should be skewed to these parts of the economy where the marginal product of resources is the highest. That suggests that allocative efficiency concerns not only regional distribution, but also industrial and sectorial distribution, and even distribution between consumption and savings. But due to data limitation, our focus will be on regional distribution.

The above principle however depends on perfect competition in the market, in another words, that the prices reflect evenly the relative scarcities of various production inputs and outputs. This condition does not hold however in the case of China. An uncompleted economic reform and the fragmentation of the national market has resulted in a multi-tier pricing system.

Even if we disregard this irregularity, the difficulties involved in this test are still considerable: there are no available statistics that can be used to calculate and compare the marginal productivity of different provinces, industries or sectors. There are available however statistics on the gross

capital and labour productivities in independent accounting industrial enterprises (IAIEs) in different provinces (or autonomous regions, municipalities) for 1986 and 1987.\(^1\) The data is included in Appendix 9. Included are also the changes in the shares of each province in China's basic construction from the fifth Five-year Plan (1976 to 1980) to sixth Five-year Plan (1981 to 1985). An improvement in capital allocation can be achieved if the provinces with higher-valued capital productivity are the ones which received an increased share. The same goes with the allocation of other factors.

Unfortunately, however, the actual picture is not so clearcut. It seems that the changes in regional distribution of investment have not coincided closely with the requirement of efficient capital allocation, although the changes have been in favour of some of the most efficient regions. But it has been in disfavour of a large number of the intermediate efficient regions, whilst it has also been in favour of some of the least efficient regions.

In particular, although both labour and capital productivity in Guangdong have improved, the improvement is not even. Among China's 26 provinces or autonomous regions (excluding three municipalities: Shanghai, Beijing and Tianjin), Guangdong's labour productivity ranked the second in 1986 and the first in 1987. That means that when price distortion is disregarded, the flow of migrant workers into Guangdong from the rest of China is largely justified.

On the other hand, Guangdong's capital productivity (measured by profit plus taxation per 100 yuan capital) ranked only the eighth in 1986 and seventh in 1987. It is thus apparent that the large amount of domestic capital flowing into Guangdong from the rest of China does not meet the requirement of efficient resource allocation. The same can be said with the concentration of DFI in Guangdong.

When introducing the factor of price distortion, the picture is likely to change in disfavour of Guangdong, since Guangdong's production is concentrated in these products which are more highly priced due to the fact

\(^1\) Include both state-owned and collectively-owned enterprises.
that price control in Guangdong is more relaxed than elsewhere in China, as part of the special policies to Guangdong.

In a word, the evidence seems to suggest that the intra- and inter-provincial flow of human resource from the North to the South and from the inland to the coast, largely induced by the regional strategy of the policy, on the one hand has resulted in greater mobility and more efficiency use of human resources in China than ever before, but on the other hand, the inter-provincial flow of capital resulted from the same policy has not resulted in improvement in the allocation efficiency of capital.

9.3. Economic Growth

The overall economic objective of the government’s policy was to accelerate China’s economic growth. To what extent has the inflow of DFI achieved this objective, and at what costs? This section will investigate the relevant evidence.

9.3.1. China’s Economic Growth and Its Sources

The fact that the Chinese economy experienced remarkable growth during the 1980s is widely acknowledged by international organizations and scholars alike. The economy registered an average annual growth rate of 9.9 per cent during 1980 to 1988, at constant prices. The growth was nonetheless uneven over the years. The following table shows the annual changes. It is apparent that growth accelerated after 1983, with two-digit annual growth (except 1986). The period marked the fastest growth years in China’s modern history.

How has this growth been brought about? Numerous studies that have attempted to find answers to this question have however resulted in varying conclusions.¹ The main difference lies in whether the total factor productivity (TFP) increased during the 1980s and therefore made a significant contribution to the overall economic growth. Due to data

limitation, however, all existing studies are confined to the state-owned industrial sector, and thus do not provide very useful results, as far as the discussion of general sources of China's overall economic growth is concerned.

Table 9.4. Annual growth of China's gross national product (GNP), 1979-88

<table>
<thead>
<tr>
<th>Year</th>
<th>GNP (current prices)</th>
<th>GNP index (constant prices) 1978=100</th>
<th>Annual change (constant prices) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>4479</td>
<td>116.0</td>
<td>7.8</td>
</tr>
<tr>
<td>1981</td>
<td>4773</td>
<td>121.2</td>
<td>4.5</td>
</tr>
<tr>
<td>1982</td>
<td>5193</td>
<td>131.8</td>
<td>8.8</td>
</tr>
<tr>
<td>1983</td>
<td>5809</td>
<td>145.4</td>
<td>10.3</td>
</tr>
<tr>
<td>1984</td>
<td>6862</td>
<td>166.6</td>
<td>14.6</td>
</tr>
<tr>
<td>1985</td>
<td>8568</td>
<td>187.8</td>
<td>12.7</td>
</tr>
<tr>
<td>1986</td>
<td>9726</td>
<td>203.4</td>
<td>8.3</td>
</tr>
<tr>
<td>1987</td>
<td>11351</td>
<td>225.8</td>
<td>11.0</td>
</tr>
<tr>
<td>1988</td>
<td>14015</td>
<td>250.2</td>
<td>10.8</td>
</tr>
</tbody>
</table>

9.3.2. DFI's Direct Contribution to China's Economic Growth

Available information indicates that DFI's direct impact on China's economic growth is only significant within the regional context where DFI is concentrated. As far as the national impact is concerned, it is still very limited. For instance, in 1989, FIEs' production accounted for only 1.5 per cent of China's industrial and agricultural gross output value (which is nonetheless substantial in absolute terms, totalling approximately RMB 42,700 million or US$ 11,340 million, at the official exchange rate.).

It should be remembered, however, that many registered FIEs had not started production; when they do, their contribution towards China's total output will increase considerably. But at present, it is more meaningful to

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look at DFI's contribution to individual regions such as Guangdong (an extreme case).

FIEs' contribution to Guangdong is considerable, although there is only piece-meal information available. In the 1988 issue of *GDJMHLTZ* (covering data in 1988), the results of an official survey covering 261 FIEs are reported. The date of the survey is not specified, but presumably it was in 1988.

The 261 FIEs were reported to produce a gross output value (revenue) of RMB 4789.33 (5877.09) millions, and employed 107,386 people. Compared to the present FIEs sample, the FIEs in that sample seem to have a relatively low labour productivity, since the average revenue of the FIEs in the present sample is more than RMB 38.89 million, whereas here it is only RMB 22.52 million. But the sizes of employment of the two are close to each other: it is 417 per FIE in the present sample, and 411 for that sample.

Assuming that labour productivity (gross output per employee) is same among all FIEs in Guangdong as the average in the 261 surveyed FIEs (which is RMB 445,992 yuan per employee), then the total output of all the FIEs in Guangdong can be estimated by multiplying labour productivity by the total number of employees in all FIEs. According to *GDJMHLTZ*, by the end of 1988, 943,474 persons were employed in the 7377 registered FIEs in Guangdong. The result gives an estimated total output of the FIEs of RMB 42.07 billions, equivalent to 23.4 per cent of the gross industrial and agricultural output of the province. Indeed, in some areas within Guangdong, such as Huizhou municipality, the contribution was even greater: the FIEs commanded 43.7 per cent of the gross industrial output in 1989.1

More over, there is evidence suggesting that economic growth rates in different localities in Guangdong is positively associated with the inflows of DFI to these localities: an regression analysis of two variables, that is, the amount of utilized DFI by end of 1987 and annual growth rate (AGR) of gross industrial and agricultural output (GIAO), in 45 county or

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municipalities finds that these two are statistically correlated at the confidence level of 97 per cent. The main results are: DF: 44, R-squared: 0.106, t-value: 2.258.¹

Given that there is little linkage between FIEs and local industries and agriculture, and that half of the products are exported, it may be suggested that it is likely that the inflow of DFI in these localities has induced the growth of GIAO, rather than the contrary.

9.4. Conclusion

This chapter has attempted to examine the direct and indirect impact of the operation of FIEs and the policy on China's export growth, efficiency and overall economic growth. It concludes that the FIEs have made a significant direct contribution to China's export growth in more recent years: during 1986 to 1990, FIEs contributed 22 per cent of China's total export growth, while its contribution to Guangdong's exports growth during 1984 to 1989 is as high as 41.7 per cent.

Due to lack of information, however, it is not clear whether FIEs have adversely affected the export growth of domestic enterprises, although it is evident that FIEs made little contribution to domestic enterprises' exports as a factor supplier. Neither is it possible to say at this stage to what extent FIEs' exports have influenced the changes in China's export structure, from a predominantly primary commodity exporter to a major manufacturing exporter, although it is certain that the impact has been positive, as a majority of FIEs' export are made up of manufactured goods.

It is virtually impossible to discuss what impact that FIEs have had on the deterioration in China's terms of trade during the 1980s, since no disaggregated data are available on FIEs' exports.

As far as the impact on China's allocation efficiency is concerned, the limited information seems to suggest that the intra- and inter-provincial flow of labour, largely induced by the policy, has not only increased the mobility of labour resources in China but probably also constituted a more efficient use of the resources; but on the other hand, the inter-provincial

¹ The source data is available in Appendix 4.
flow of capital, or at least the capital flow from others to Guangdong, it has not met the requirement of allocative efficiency, since Guangdong is far from being the most efficient user of capital.

Finally, it may be suggested that the impact of DFI on China's economic growth is limited but increasing. However, the impact on Guangdong's economic growth seems to be significant, although lack of data does not permit accurate estimate of the extent. In 1988, the FIEs in Guangdong probably made up one-quarter of Guangdong's total GIAO. While in some areas such as Huizhou municipality, the share was close to one-half in 1989. Moreover, it is found that the annual growth rate of GIAO during 1983 to 1988 and the amount of utilized DFI by end-1987 in 45 constituent units in Guangdong (all included in the PRDEOA), for which data are available, are positively and statistically associated with each other.

Admittedly, the operation of FIEs in the Chinese economy and the implementation of the policy have impacts other than what has been discussed so far. Among these impacts, the tendency of decentralization and its related consequences calls for some discussion, since all evidence points to its significance. This will be done in the next chapter.
CHAPTER 10. THE ROLE OF LOCAL GOVERNMENTS

It was suggested in Chapter 5 that one of the important measures that the Chinese government has adopted to encourage DFI is to give power to Chinese local governments in handling economic matters. In fact, the results of both the investors' survey and the FIEs survey, as described in previous chapters show that local government officials in Guangdong played a very important role in organizing and improving the business conditions for the FIEs. On the other hand, however, there is also evidence of negative aspects related with this decentralization process. This chapter aims to highlight some of these aspects, both positive and negative ones.

10.1. The Status of Local Governments in Guangdong

The current Chinese local government system consists of four levels: province, municipality, county and township. In parallel, the status of cities varies: some are equivalent to provinces, like Beijing, Shanghai and Tianjin; some are equivalent to municipalities; and the rest are equivalent to counties. One important difference between an ordinary city and a municipality is that the latter is usually divided into a number of urban districts, and these districts have their own administration, which are equivalent to county governments. Thus local government includes: provincial government, municipal government, county and city government, district government, and township government. Among them, provincial government is only quasi-local, since it is closely connected with the central government. In fact, at least in principle, its main function is to represent the central government in managing part of the country. In 1989, there were 16 municipalities (including 38 urban districts), 3 cities, 76 counties and 1617 townships in Guangdong.1

Unlike their counterparts in other countries, Chinese local governments perform a wide range of functions. They are not only administrative bodies but also own and manage many business and utility facilities. Let us look at their position in business ownership first.

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1. GSB, GTN: 1989, 1990, p. 3, 122. Included in the 1617 townships are 351 Xiang, which are equivalent to townships but designate overwhelmingly agricultural areas.
As indicated before, there are basically three types of ownership in China (excluding foreign ownership): state ownership, collective ownership, and private ownership. The last type is concentrated in catering and retail business. Its significance is very limited, except in terms of employment. Before the economic reform, state ownership used to dominate China's economy. For instance, in 1975, state-owned enterprises accounted for 97 per cent of fixed assets in industry, 63 per cent of employment, and 86 per cent of gross output. In addition, 92.5 per cent of retail sales in China are made by state-owned enterprises.¹

This has ceased to be the case. Collectively-owned enterprises have experienced a steady increase in the past decade. Although, by definition, collective ownership is by groups of individuals, it is often closely connected with local governments. This is because local governments in China can mobilize resources more easily than groups of individuals for legislative and legal reasons. The earliest collectively-owned enterprises resulted from the co-operativisation movement of craftsmen in the earlier 1950s, which were often organized under the auspices of local governments in cities. Another origin of collective enterprises is the industrial and commercial establishments run by People's Communes during the Cultural Revolution. These establishments were set up by pooling resource from member brigades. After the People's Communes were replaced by township governments, these establishments became owned by township governments. It is the fast expansion of these enterprises that has changed the scene of China's economy in the 1980s.

Taking Guangdong as an example: of a total of 28,441 industrial enterprises in 1988, 20,352 were collectively owned (of which, 12,270 were owned by township governments), only 6,537 were state-owned, and the rest, 1551, were owned in other forms (excluding private ownership, but including FIEs). Collectively-owned enterprises produced 31 per cent of Guangdong's gross industrial output in the same year.²

If local governments have come to own many industrial and commercial properties only after the economic reform, rural local governments have

for long been the *de facto* owners of most of China’s land. In 1975, approximately 90 per cent of arable land was owned collectively.\(^1\) This should not have been affected by the agricultural reform in the past decade, since the reform has affected in principle use-rights rather than ownership of land.

Chinese local governments are also responsible for appointing the management of these collectively-owned enterprises, and for the management of a large portion of state-owned enterprises. There are two types of state-owned enterprises: centrally-administered and locally-administered ones. Take Guangdong as an example again: in 1988, out of 6537 state-owned industrial enterprises, approximately 6000 were administered by local governments.\(^2\)

But it would be wrong to suggest that, generally, Chinese local governments have great influence over local economies. As a matter of fact, the local economy is to a great extent subject to the control of central government, which is maintained through fiscal and monetary constraints upon the lower levels by higher level governments as well as the limits to which the lower level governments are allowed to exercise certain legislative, administrative power.

The obligation of local governments to deliver revenue to the central government is such a constraint. The current Chinese taxation system does not have a clear demarcation between taxes to be collected by central and local governments. In fact, all taxation revenues, except customs duties, are collected by local governments. That means that revenue obligations of local to central government have to be negotiated and decided on a yearly basis unless there is a longer-term arrangement. It also means that the magnitude of disposable incomes of local governments depends very much on the outcome of the negotiation between themselves and the central government.

\(\text{Christopher Howe, } op. \text{ cit. } p. \text{ 31.}\)

\(2.\) This is estimated from the following information given in *GTN: 1989* (p. 92): The total number of employees in these 6537 state-owned enterprises was 1755,600, of which 1622,600 were employed in the enterprises classified as "under the jurisdiction of local governments". The estimate is made by assuming that the state-run enterprises and the local-run enterprises (both are state-owned) employ about the same size of workers per unit.

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Pre-fixed limitation on FAI and bank loans is another such constraint. In order to implement economic planning and control the pace of the economy, central government often sets an annual limit for local government in these key aspects. That is to say, local government can not expand capital investment without the approval of the central government.

Furthermore, central government can limit the power of local governments by other means. For instance, in the development of DFI, an important factor is that local governments have power to deal with applications. In the earlier years (approximately from 1979 to 1982), local governments were not allowed to do this, only the MOFERT in Beijing could.

Starting from 1983, however, provincial governments were given power to deal with joint venture applications which involve investment amount up to US$ 3 millions. But they were still not allowed to deal with WFOEs applications. The limit of investment amount was raised twice, in 1985 and 1988, to US 10 millions, and then US$ 30 millions for coastal provincial governments, and US$ 5 millions, and then US$ 10 millions for inland provincial governments. It was not until 1988 that local governments were given power to deal with applications for wholly foreign-owned enterprises (WFOs) within their allowed limit. But the MOFERT can still veto these WFOs applications.

What is significant in the case of Guangdong is that, in order to give full play to the role of Guangdong’s local governments in attracting DFI, the Chinese central government has relaxed its fiscal and monetary constraints on the province, and has delegated a great deal of power to Guangdong in the package of "special policies and flexible measures", as has been described in Chapter 5 and various other places.

The package greatly increased the financial and administrative capacity of Guangdong’s provincial government on the one hand; and on the other hand, it reduced Guangdong’s obligation to the central treasury. For instance, it has been reported that Guangdong pays one-tenth as much taxation revenue as in absolute terms Shanghai, and one-fiftieth as much per person, to the central government.
The Guangdong provincial government in turn made a similar arrangement with the municipal governments, and then later with county governments, and so on. So there was a systematic decentralization in the management of economic matters.

10.2. The Role of Local Governments in Utilizing DFI in Guangdong

10.2.1. Local Government As a Planner for Utilizing DFI

There are two basic features of the planning activities related to DFI in Guangdong. First, planning is usually confined to a regional context, and conducted by low level governments; second, local governments have gradually become more conscious about the potential of utilizing DFI to develop the local economy and the relative desirability of different kinds of DFI.

In the earlier years, planning was almost impossible because government officials knew little about DFI and about what DFI could help to achieve. There was such a confusion that for some years, there was even difficulty for local governments (who had been the partners of a large number of EJVs and CJVs) to find someone to sit on the board of directors in an EJV or CJV; few people had any knowledge of the relevant laws, regulations or standard business practices at all. Moreover, the local governments were not authorized to deal with DFI applications. Little guidance was given in terms of investment directions, and local governments felt unable to influence the flow of DFI. Thus the majority of the FIEs established during earlier years were in service sectors such as hotels, restaurants, real estate companies, and the few manufacturing FIEs were mainly oriented on domestic market.

Later on, local governments were given the power to deal with DFI applications. Their ability to influence the flow of DFI also grew with experience. In the meantime, the central government started to recognize certain directions for DFI, one of which is DFI in manufacturing. The MOFERT issued a series of notices to the provincial government, and through this to the lower levels of governments, that DFI applications in certain industrial sectors or of certain products would not be approved or
should not be approved. Still there was no national or provincial plans, although special incentive were offered to the export-oriented and technologically-advanced FIEs in 1986. Officials from the Guangdong branch of MOFERT reported in early 1990 that they were currently working on the details of a program to encourage DFI in industries of raw materials, semi-components and technology-intensive industries through fiscal incentives.

In contrast, some low level governments have acted more swiftly than the central and provincial governments in planning the utilization of DFI and implementing their plans to develop the local economies. This seems to have much to do with the different perceptions that the officials at different levels (and to a lesser extent, places) have towards DFI and its role in the Chinese economy. Noticeably, the lowest level officials find the idea of utilizing DFI to develop the local economy more acceptable and feasible than officials at higher levels, and they are thus more determined in pursuing DFI.

The central government maintains that the FIEs are only a supplementary part of the economy, so consequently the question of developing the economy by employing DFI as the main tool has been regarded as incorrect. An interesting reflection of this attitude is that, in the Beijing Branch of MOFERT, an official wondered what percentage of FIEs this so-called "supplementary part" meant ("Is it 10% or 15% or something else?" she asked). Indeed she suggested to this author to ask the MOFERT. It turned out later that people in the central government - such as the State Planning Committee - were equally uncertain.

In contrast, some local officials in Guangdong saw foreign capital as the main resource available for developing the local economy. DFI was the preferred form of utilizing foreign capital, rather than foreign loans, since the former involved a transfer of technology. They made special plans to implement the strategy, although the plans were sometimes full of wishful thinking.

In this regard, there were a number of outstanding cases, each of which demonstrates different features of the planning activities. One striking case is Huizhou municipality, which was touched upon earlier as an example of
encouraging the increased use of local content by local governments. The municipality, including four counties and a few urban districts, was among the most backward regions in Guangdong. The urban districts had only seven factories that belonged to the municipal government in 1984, with a gross industrial output of merely RMB 4 millions. In comparison, the gross industrial output in 1989 was RMB 1 billion. In more general terms, the gross industrial output of the whole municipality increased from RMB 270 millions in 1980 to RMB 2300 millions in 1989, at constant prices. The annual growth rate over the ten years period was 27 per cent. Whereas the annual growth rate from 1984 to 1989 was 34 per cent.

How did this happen? The answer lies in the municipality’s success in planning and implementing its strategy to utilize DFI. The government drew up such a plan in 1984, in which the whole region was divided into three areas for different development directions: the Da-ou area that is along the coast and close to a deep harbour, was to attract heavy industries; the urban districts were to develop surgical and telecommunication equipment manufacturing; and the vast rural areas were to expand outward-looking agriculture.

The government has since worked most vigorously to put the plan into action. In April of 1989, it signed a contract with an international consortium, Panda Motors Corporation, to allow the establishment of a wholly foreign-owned car-making plant in the Da-ou area. The project involves a first-term investment of US $ 250 millions and plans to produce 300,000 small cars annually for export, which will make the municipality the largest car export base in China.

Interestingly, however, the plant was virtually ”intercepted” by Huizhou. The foreign investor had signed an agreement to build the plant in Helongjiang province in Northeast China in the first place. But it decided to move to Huizhou because the local governments in Helongjiang had difficulties in deciding whether to grant the fifty-year land leasing contract to the foreign investor, while the Huizhou municipal government promptly made a favourable offer.

Another example concerns a large oil refinery plant, wholly owned by Shell International. The foreign investor was holding negotiations with
Huizhou municipality’s neighbour, Dongguan city, when Huizhou municipality organized an engineering survey of the site in the Da-ou area and presented the survey results to the foreign investor. As a result, the billion dollar project came to Huizhou too. Both of these example illustrate how ruthlessly Huizhou municipality has striven to attract DFI. The local officials pointed out that behind the ruthlessness is strong faith in an outward-looking economy and the determination to develop their region.

The municipality is becoming one of China’s major producers and exporters of electronic goods, such as records, car radios, telecommunication equipments. The role of the FIEs in the municipality is by no means ”supplementary”. The FIEs production in 1989 accounted for about half of total industrial output of the municipality. It can be expected that, after the two above major projects start production, the economy of Huizhou municipality will experience further growth, and the role of FIEs will expanded further.

Another case is Kaiping county which is well-known as one of the five”homelands of overseas Chinese” in Guangdong. The outstanding character of this case is two-fold: first, efforts were concentrated in a few selected fields; second, its approach in pursuing foreign investors was systematic.

The county government made its first plan to utilize DFI to develop the local economy in 1983. Two sectors were chosen as the prime areas to attract DFI: textile and medicine capsule production. The textile industry was chosen because the local planners were convinced that one of the fundamental forces underlying the take-off of the Hong Kong economy was its massive development of labour-intensive textile industry. The county had no textile industry at all in 1983 (there had once been a small factory, weaving towels, but it had ceased production by then.). The other industry was chosen on the ground that the county possessed the best production facility in that industry in China, although the facility was out-of-date.

By April of 1990, the county had 6 textile FIEs with a tight vertically integrated structure, employing over 2700 persons, over half the total employment by all FIEs in the county. In the meantime, the medicine capsule factory, a CJV with a Hong Kong company and using Canadian
equipment, had produced for two years, a product of high standard for the domestic pharmacy enterprises exporting medicines. In 1989, the output of the FIEs accounted for one-third of the total industrial output in the county.

Kaiping county’s planning of DFI included a systematic search for foreign investors. A local official showed the author five to six hand-written namebooks of overseas Chinese, who originated from that county, classified as potential investors or traders, each one containing some two hundred names and other information. In sum, they have some one thousand potential investors or traders in mind. I was told that the county government had just distributed investment leaflets to some of the potential investors, costing RMB 18,000 yuan for the latest one.

Generally speaking, local governments have been very active in soliciting potential foreign partners in Guangdong. One such route has been the various Symposia of Promoting Foreign Investment, which have been held both at home and abroad a number of times. On such occasions, local governments put forward project proposals for FI, and potential foreign investors were invited to participate in, and discuss the details with, local officials. For instance, in the Symposia on Promoting Foreign Investment held in Hong Kong in 1988, 3000 projects were proposed by local governments. Consequently, agreements for investment were signed for 1500 projects (including both DFI and indirect foreign investment).

10.2.2. Local Government As a Developer of Infrastructure

A major strength of local governments attracting in DFI is the development of infrastructure. Infrastructure in China has generally been poor, mainly because, while the central and provincial governments have been for decades the only providers, their funds were limited. Infrastructure services are used by people almost free of charge and do not generate adequate revenues. Moreover, the investment emphasis was different. With the opening-up of the PRDEOA, the need for a better-developed infrastructure was mounting. Furthermore, with the introduction of the new “special policies and flexible measures” in Guangdong, a new idea has been developed: whoever builds is to benefit, and whoever uses is to pay.
The idea was revolutionary. It roused such an intense concern and debate in and outside Guangdong that a film was made to depict the ideological struggles surrounding the issue. Only in travelling round the province is it possible to realize to what extent that invention has been of benefit. A trip from Guangzhou to Zhuhai SEZ takes only four hours to complete by car, while it used to take at least eight hours, or as long as twelve hours, because travellers had to stop and take ferries five times. There are now five bridges built in less than 10 years.

Similar things happened in every field of infrastructure. Over 60 per cent of the counties in Guangdong can now telephone directly to and from abroad, and there is no rival area in China. Although electricity was still in short supply in quite a few areas, the situation was being improved rapidly, and in some areas local officials were already talking about excess capacity of their newly-built power plants. China’s first freeway had just been put into use from April of 1990 between Guangzhou and Foshan. Changes are so exciting that it is important to know how they actually came about. Local officials were delighted to explain.

The infrastructure was funded by many sorts of resources: including provincial funds, foreign loans, donations from overseas Chinese, pooled investment from individuals, enterprises and local governments. Local governments, greatly concerned with improving the investment environment, were usually the initiator and organizer.

Telecommunication facilities were developed in a number of regions by utilizing foreign governmental loans, which were organized by the provincial government, but the debtors are local governments. That means that the latter holds entire responsibility to repay the loans. In some cases, communication facilities were put in place by pooling money from potential users, both enterprises and individuals. For example, in Dongguan city, a user that wanted a telephone to be installed had to contribute an extra RMB 4000. The business had to be good enough to support this kind of expenditure.

Electricity plants were often developed by EJVs or CJVs between local government and foreign companies (some of which turned out to be HK-
based mainland entities), because the electricity plants needed imported equipment and fuels.

Take Kaiping county again as an example. The county relied on the provincial power supply network throughout the 1950s, 60s, 70s and did not feel much constraint, since production scale was small (in 1983, it had a gross industrial and agricultural output of RMB 560 millions). But it became increasingly troubled by the shortage of electricity supply in the middle of the 1980s with the faster growth of the economy, coupled with a reduction in supply from the provincial power network. In response, two power generators were installed in 1986 with funds from the county government revenue. The problem was eased.

However, the capacity of the generators was small, the economy in the meantime was growing at great speed (in 1989, the gross output of industrial and agricultural production of the county was RMB 1.3 billions in constant prices), and the shortage of power was once again a serious problem by 1988 and 1989. At its worst, power was not available for two days every week. Finally, the county government decided to enter a CJV with a Hong Kong investor to put up a new power plant, with a total investment amounting to US$ 9.78 millions. The plant went into production in March 1990. It can provide more electricity than the total supply from the provincial network. The county, for the first time, has surplus power.

A similar electricity development scheme took place in Fushan municipality (including four counties and a few urban districts) on a larger scale. Starting from 1985, seven electricity plants have been built with FI, involving a total amount of over US$ 100 millions. Six of them are CJVs, and one is a WFOE. Noticeably, all the so-called foreign investors were companies based in Hong Kong but belonged to the local governments in Guangdong. What had happened was that these Hong Kong-based companies borrowed the capital from Hong Kong banks, and then invested in these plants. After the loans has been repaid, the plants will be the property of local governments, although by name they belong to these Hong Kong based companies.
Ports were also developed by joint ventures between local governments and foreign companies, particularly Hong Kong ones, since the ports and the related shipping companies have much business with Hong Kong.

The example of Kaiping county can again demonstrate well the development of the port and shipping industry. The county seat, a small town, used to have direct shipping lines to Hong Kong before the liberation in 1949. Lines were re-opened during 1982 and 1983. But there was only one ship and one passenger port. With the development of economic connections between the county and Hong Kong, it was necessary to increase ships and expand business to handle freight. In the meantime, the shipping business was making a loss for various reasons. So an EJV was established in 1988 between the county government and a Hong Kong-based Guangdong shipping company to build a container terminal and increase the number of ships from one to three by 1989, involving a total investment of US$ 9.26 millions. In the year 1989, the company was making a profit of RMB 5.8 millions.

Until the recent plan to build the Shen-Guang freeway (between Shenzhen and Guangzhou) by using large amounts of foreign loans, however, roads and bridge have been built mainly by pooling domestic resources. In this respect, donations by overseas Chinese have made significant contributions. For instance, the largest bridge in Panyu county, Lo-xi Bridge, cost RMB 90 millions to build. RMB 30 millions came from the province’s Road Construction Fund, RMB 20 millions from overseas Chinese’ donations, and the rest were pooled from other sources.

10.2.3. Local Government As a Partner of DFI

It has been shown so far that local governments own and manage huge business properties, including land and infrastructure. This has served as a basis for local governments to act as an important business partner for foreign investors. This is particularly so in the more backward areas, because other business institutions in these areas are relatively weak.

Furthermore, foreign investors prefer to go into partnership with enterprises owned by local governments rather than those owned by individuals or groups of individuals, since the main purpose in having a
local partner is to have easier access to the administration (which include raw material, power supplies, etc.). The most convenient way is to have someone from the government sitting on the board of directors.

There is a special kind of strength in the business arms of local government departments which act as partners in FIEs. The related enterprises are easier to coordinate and are capable of forming a powerful economic force in the market. For example, the General Industrial Development Corporation of Huizhou municipality, one of the business arms of the Municipal Economic Affairs Committee, participated in 14 EJVs as a partner. A majority of the EJVs are purposely related to each other either as suppliers or buyers of material inputs, and, as has been shown earlier, have achieved considerable economic success.

10.3. The Negative Aspects

Coupled with the region-biased open policy, the decentralization of economic management in China, particularly in Guangdong, has certain negative affects, however. For instance, much of the foreign debt in China was borrowed by local governments. The central government has been unable to keep a reliable record of China’s foreign debt. In 1989, the central government attempted to remedy the situation by restricting the number of organizations that were authorized to deal with foreign borrowing. But the ratio of DFI to total FI in 1990 is still as low as 33.8 per cent.

It has been suggested that the decentralization, or more precisely the growing power of various levels of local governments, has hampered the realization of one of the most important aims of the Chinese economic reform, that is, to make state-owned enterprises independent profit-making business organizations. It has been estimated that, of the power delegated by the central government to state-owned enterprises, about 60 per cent has been intercepted by local governments.1

The independent status accorded to Guangdong (and later some other provinces) by the central government has also made it difficult for the

central government to enforce fiscal and monetary discipline, and contributed significantly to the rampant inflation during 1988 to 1989.1

Furthermore, this study has also observed evidence that decentralization of economic management has caused market fragmentation, loss in economies of scale and duplication of capacities.

For instance, as described in Chapter 7, in local government’s efforts to overcome a shortage of power in Guangdong, a great number of small-scale power plants have been built, which produce electricity at a cost considerably high than large ones and cause the rise of production cost in the economy.

<table>
<thead>
<tr>
<th>Locality</th>
<th>Production capacity (can no./minute)</th>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guangzhou</td>
<td>1000</td>
<td>on</td>
</tr>
<tr>
<td>Fushan</td>
<td>300</td>
<td>on</td>
</tr>
<tr>
<td>Shansui</td>
<td>200</td>
<td>on</td>
</tr>
<tr>
<td>Huizhou</td>
<td>800</td>
<td>off</td>
</tr>
<tr>
<td>Zhuhai</td>
<td>200</td>
<td>off</td>
</tr>
<tr>
<td>Zhaoqi</td>
<td>400</td>
<td>off</td>
</tr>
</tbody>
</table>

Note: the three factories whose operations were off after trial production due to problem of quality.

Duplication of production capacities is also an acute problem in Guangdong. To illustrate, let us look at tin-can production, which by 1987 had been demarcated as restrictive area for new DFI. According to an interview with the managing director of one of the leading tin-can producers in Guangdong, by early 1990, China as a whole had introduced fourteen tin-can production lines, of which six were in Guangdong. As the following table shows, the capacity and operational conditions of these six

2. According to interview by this author.
factories varied greatly. Of the three factories that were in operation, there was great difference in technical efficiency: the difference between the one in Guangzhou and the one in Shansui was as big as five times.

This kind of situation can also be found in other branches of the economy. It is made possible largely by the existence of protected and fragmented local markets. It is commonly believed that local governments played an important role in the creation and maintenance of such markets. This is not only because the decentralization of economic management has increased the economic capacity of local government, but also because the region-biased policy causes local governments to become hostile to each other, and therefore provides a strong impetus to protect local business entities.

10.4. Conclusion

One of the measures as well as one of the most significant consequences of the DFI policy is the growing role played by local governments in China generally, and particularly in Guangdong. This chapter has shown that this has resulted in both positive and negative affects: on the one hand, local governments in Guangdong have played a great role in encouraging DFI and in improving the business environment for FIEs, including building infrastructure, developing local content for products of FIEs; on the other hand, however, the powerful local governments have also become a formidable force in preventing the formation of a unified market, and in protecting and maintaining the existence of inefficient and duplicated production capacities. They also cause problems at the national level by undermining central economic management. All these are however difficult to quantify, although it is likely that the costs involved are significant.
CHAPTER 11. CONCLUSIONS

This thesis has aimed to assess the effectiveness of the Chinese government's policy of encouraging DFI in manufacturing. More specifically, it attempts to ask and answer the following questions: first, what were the policy objectives? second, to what extent have the policy objectives been achieved? third, what are the costs involved and are they significant? This final chapter will summarize the findings and shed some light on their relevance to other LDCs attempting similar policies.

It is the opinion of this author that the overriding objective has been to gain political legitimacy and authority for the CCP and the government. It is suggested that the policy, from a historical point of view, might not constitute such a radical change as has often been reckoned: Chairman Mao envisaged the utilization of foreign capital in the construction of New China in 1945; although historical events prior to late 1970s did not allow the realization of that vision, the Chinese government had, except during the chaotic Cultural Revolution, usually been keen on foreign technology in order to strengthen China's economy, because the majority of the leadership believed, and still believe, that economic strength is the source of political and military power.

The change is nonetheless significant: prior to the 1970s, there were overwhelming doubts among the top leadership about the possibility that, and the extent to which, foreign technology and capital could be utilized to achieve independent economic development, which was strongly advocated by then leadership represented by Chairman Mao; but the historical conditions in the 1970s persuaded some of the Chinese leaders that the foremost urgent task was to develop the economy by whatever means including foreign investment. This is the result of the combined influence of the following three internal and external factors:

First, after the devastating Cultural Revolution and the impending collapse of the public's faith in the CCP as well as the Chinese economy, there is a sense of emergency for the CCP to find a quick and dramatic solution to China's economic and political problems. This was reflected in the fact that much of the official argument for the policy draws its support from Lenin's writings on the issue during the extraordinary New Economic
Policy period. Lenin said: "... we must utilise capitalism (particularly by directing it into the channels of state capitalism) as the intermediary link between small production and socialism, as a means, a path, and a method of increasing the production forces."

Second, the international economy and politics have been changed: for the former, the world economy has become increasingly integrated through intra-industry trade; the law of comparative advantage requires an individual country to participate in the international division of labour to be able to benefit from the ever evolving process of specialization, as the rising of the NICs has demonstrated; for the latter, the realignment of political forces in the 1970s provided the necessary conditions for China to be able to absorb foreign capital as well as foreign technology.

Third, China's aging leadership feels strongly that the cause of national unification of the mainland with Hong Kong, Taiwan and Macau has a better chance of succeeding before the disappearance of the older generation and the links embodied in them. In the meantime, however, they cannot ignore the fact that there is a massive economic gap between the mainland and these three territories, particularly Hong Kong and Taiwan. This is why Deng Xiao-ping has called for the "building-up of a couple of Hong Kongs" in the mainland, and that the various SEZs have set themselves the task to catch up with Hong Kong or Taiwan.

Although denied by the Chinese leadership, there are fundamental contradictions within the rationale: on the one hand, between nationalist independence and economic development, and, on the other hand, between socialist aims and capitalist means. The Chinese leadership has attempted to resolve the first contradiction by arguing that only a technically and economically strong economy, to which foreign investment can make a contribution, will reduce China's dependence on foreign influences in the long-run. Concerning the second contradiction, it argues that the development of productivity with the help of foreign capital and technology will enhance the advancement of socialism.

Neither of the arguments are totally convincing. On the first account, the leadership seems to overlook the fact that the prerequisite of FIEs being able to make a contribution to China's technological and economic capacity
is a considerable presence of foreign capital, whose control lies outside China. Unless China is prepared to eliminate this foreign control in the future by nationalizing or expropriating foreign assets, there is no way that foreign investment today will make tomorrow's China less dependent on foreign influences.

The second argument is even more problematic. Although it makes perfect sense by reckoning that foreign investment will lead to the development of productivity, it is difficult to see how it can serve as a means to advance socialism, because the distinction between socialism and capitalism does not, as has happened in the world, lie in the difference in the level of productivity but the relationships embodied in the production. Again, unless China is planning to eliminate this foreign ownership in the future, it is unlikely that foreign investment can help to achieve socialism.

The implication is that the arguments put forward by the party only serve the purpose of legitimating the policy rather than offering a solid strategy for advancing either the cause of nationalist independence or socialism. In other words, the policy is fundamentally a temporary measure, or the party has lost its ideological direction in a desperate pursuit of China's economic growth.

Indeed, the main arguments for the policy were economic - that is to say, the policy is expected to achieve a number of economic objectives. Under the overall economic goal - that is to promote China's economic growth - these include:
1). expansion of capital formation;
2). transfer of technology (including managerial skills);
3). growth of exports;
4). improvement of productivity and efficiency.

In addition, the policy also has other less important goals such as increasing the earnings of foreign exchange, and employment opportunities, or less defined goals such as enhancing China's economic reform.

The present study has concentrated on examining the empirical evidence related to the above four principal economic objectives. The findings have been presented in the preceding chapters. To summarize, they are the following:
First, China has achieved outstanding success in attracting a substantial amount of DFI inflow compared with most other developing countries. This can be attributed to a number of factors: first, the prospect of a colossal Chinese market in the future proved to be an irresistible temptation to the international business community; second, the rapid growth of the Chinese economy in the 1980s and equally buoyant expansion of the consumer durables market in China offered a profitable business opportunity to foreign investors; third, deepening specialisation in the world's manufacturing produced a comparative advantage for labour-abundant China; fourth, China's special connection with Hong Kong, and to a lesser extent with other Asian NICs, particularly Taiwan, made China, particularly the more accessible east coast, a prime choice for relocating some of their labour-intensive operations; fifth and most importantly, the Chinese government's policy, with dominant political motivation and legitimation, has enjoyed a rare consistent all-around back-up over the 1980s: some 200 laws and regulations were promulgated to promote foreign investment; a large sum was invested to improve infrastructure; a competitive incentive package was designed and offered to foreign investors; administrative and financial decentralization was initiated to stimulate local initiatives; and so on.

On the other hand, however, the composition of overall FI inflow has not been as desirable as hoped - more than two-third of it has been made up by foreign loans rather than DFI. In a sense, this may be regarded as part of the price that China has paid to attract foreign investment, since the limited data indicate a close correlation between the volume of foreign loans and DFI in Guangdong, where the majority of the foreign loans have been spent in developing infrastructure.

As far as DFI's direct contribution to China's capital formation is concerned, it has been limited, although the contribution to Guangdong province is considerable. FI has also made a significant positive impact on the changes in Guangdong's industrial structure that have taken place in the 1980s.

To increase the inflow of foreign capital, the policy still has much room to be better-directed: the size of foreign capital inflow per DFI is much larger
with western investors than overseas Chinese investors, and there is a major difference in capital intensity between FIEs with western and non-western investors in favour of the former; but the current legislation offers special incentives to the latter out of political considerations. In fact, it has been dominated by investment from Asian developing neighbours, particularly from Hong Kong.

Second, the overall transfer of technology has been significant, although most of the technologies are standardized ones, as most of the FI has come from neighbouring Asian developing economies. Here the issue of specially favoured investors once again calls for attention: in order to maximize the transfer of technology, more emphasis should be given to attracting western multinationals which often possess more advanced technology.

The transfer has taken place mainly through internal or semi-internal rather than market means. This is determined by the lack of a competitive market in China. One corollary of this is that the transfer of technology is better conducted in FIEs where the Chinese parent companies are technically mature producers, such as established state-owned enterprises. But on the other hand, this creates possible circumstances where by the Chinese parent companies can share some of the fiscal and administration privileges that FIEs are entitled to, and escape from the government’s control. It hence poses a threat to the state’s control, particularly over the state-owned enterprises.

The beneficial effect of technological transfer by DFI is particularly great in Guangdong, partly because the inflow of DFI has been substantial in both absolute and relative (to other sources of investment) terms, and partly because the geographical distribution has been more widespread to the countryside rather than concentrated in a few urban centres. By providing the necessary technology, capital and expertise, DFI in manufacturing has played a very important role in the development of local manufacturing in the province. This provides a more efficient use of the surplus workforce which has been released from reformed agriculture.

There is however evidence that this newly-developed manufacturing sector bears little relationship to the existing industrial basis. A dual economy within the manufacturing sector, one related to foreign capital and
influential local governments and highly mobile in both procurement and marketing, and the other largely localized and with little political strength, seems to be the inevitable outcome.

Third, FIEs have made a significant direct contribution to China's export growth in more recent years: during 1986 to 1990, FIEs contributed 22 per cent of China's total export growth, while its contribution to Guangdong's exports growth during 1984 to 1989 was as high as 41.7 per cent.

Due to lack of information, however, it is not clear whether FIEs have adversely affected the export growth of domestic enterprises, although it is evident that exports by FIEs include some products by domestic enterprises and previously exported through other channels. The crucial point is that the central control over one of China's most precious resources, that is foreign exchange, has been considerably undermined, due to the collaboration between state-owned enterprises and FIEs.

Most of the FIEs in Guangdong have a relatively high propensity to export. And the exports have been characterized by labour-intensive products. This is particularly evident in FIEs with investors from Asian NICs. Whereas FIEs with western investors show a great reluctance to export. In conjunction with what has been earlier contrasted between western and Asian investors (although not a perfect contrast), it is apparent that one of the policy objectives, that is, to promote exports, is contradictory to two other policy objectives, i.e., to attract foreign capital and introduce advanced technology.

It thus might be necessary to pin-point tasks for different areas of the economy in utilizing DFI: for certain areas such as light manufacturing, emphasis should be given to promotion of exports, while in other fields such as machinery and transport equipment manufacturing where transfer of technology is important, the promotion of exports can be compromised.

At any rate, there is still great room to improve the FIEs' export performance. The problem is indeed not so much that some FIEs export little because they produce more technology- or capital-intensive products, but that the current conditions, mainly the distorted pricing structure in the
market and tariff protection, factually provide incentives for FIEs to sell in the domestic market rather than to export. In a number of cases, products by FIEs were sold at a price considerably higher than imported ones. On the other hand, there is also evidence suggesting that domestic consumption might have subsidized exports by some FIEs.

It should be pointed out that, due to the present taxation arrangement and administrative decentralization, local governments, eager to expand their taxation base, have no incentive to exercise price or quantity control over FIEs’ domestic sales, particularly those sold to regions beyond their jurisdiction. Consequently, local governments often try to prevent the sale of manufacturing products from outside their regions. One corollary of this is the fragmentation of market and the continuous operation of inefficient production units.

Fourth, gross labour productivity in the FIEs in Guangdong was at least 100 percent higher than state-owned enterprises, and to a greater extent, collectively-owned enterprises. It is however impossible to compare these three groups in terms of net productivity, for instance, measured by value added per unit of sales income, due to lack of data. But the performance of the FIEs in Guangdong in that aspect appears to be moderate. Their cost composition indicates that future improvement will depend chiefly on a reduction of electricity and material inputs costs, particularly the latter. The development of local content with competitive price and quality is therefore very important.

In both respects, local governments were found to have an important role to play; some of them have indeed done so. There is evidence however that the widespread development of small-scale power plants by local governments has led to a loss in economies of scale. On the other hand, with few exceptions, local governments seem not to be sufficiently concerned with the fact that most of the DFI operations in Guangdong depend heavily on imported inputs, and thus remain foot-loose and movable.

The discussion of DFI’s impact on China’s allocative efficiency is strongly impeded by the distorted pricing system in China. There is a major gap between nominal and real costs (or returns). At any rate, the DFI’s impact
on the efficiency through its impact on China’s industrial structure is limited, since it does not increase the investment weight of some of the most severely bottle-necked sectors such as industry, agriculture, energy, communication and transport. However, the situation in Guangdong is considerably better.

Indeed, DFI’s impact on China’s allocative efficiency is most significantly represented by its impact on the changed geographical distribution of capital, workforce and other resources in the 1980s. Under the Chinese government’s strong regional strategy that favours the coastal areas, there has been a massive flow of domestic resources from inland areas to more developed coastal areas.

Whereas the economic argument of the regional strategy was to achieve economic efficiency by concentrating resources in the economically more efficient coastal area, the limited information seems to suggest that the reality has not been consistent with it: although the intra- and inter-provincial flow of labour, largely induced by the policy, has not only increased the mobility of labour in China but probably also constituted a more efficient use of the resource, the inter-provincial flow of capital, or at least as far as the capital flow from others to Guangdong is concerned, has not met the requirement of allocative efficiency, since Guangdong is far from being the most efficient user of capital.

Finally, the impact of DFI on China’s economic growth is limited but increasing. The impact on Guangdong’s economic growth nonetheless seems to be significant, although lack of data does not permit accurate estimates. In 1988, for example, FIEs in Guangdong probably made up one-quarter of Guangdong’s total GIAO. While in some areas, the share was even greater. Moreover, there is statistical evidence that, within the PRDEOA, local economies’ annual growth rate are positively related with the amount of utilized DFI.

The policy’s impact on its political objectives, including strengthening the CCP’s power and authority and promoting national unification, is more difficult to judge. As far as the latter is concerned, the impact has been largely positive: with the inflow of capital from Hong Kong, Macau and Taiwan, there have been increasingly close economic and social links.
between them and the mainland, which can serve as a good ground for future political integration between them. This is perhaps not exactly in the way that it was intended (that is, to narrow the economic gap between these three and the mainland areas that surround them), but the result is nonetheless the same.

Concerning the objective of political power and authority, the picture is less certain. On the one hand, the policy has won some praise for the party and therefore added more legitimacy to it abroad. But on the other hand, the implementation of the policy involved some very high prices for the party domestically.

For instance, in order to provide incentives to local governments to attract FI, the central government initiated the decentralization process, which was first confined to Guangdong and Fujian but later extended to other localities as well; as a consequence, the financial and economic power of the central government has been substantially weakened.

Moreover, the implementation of the policy overshadowed the crucial economic reform, particularly reforms involving the state-owned sector, which have caused the relative decline of the state-owned sector in the economy. This further undermines the power of the state.

Another damaging fact is that, during the 1980s, China accumulated a substantial amount of foreign debt, largely to finance the development of infrastructure. As has been suggested earlier, this is largely related to the fact that administrative and financial decentralization has produced a insatiable appetite of local governments for bank loans, foreign or domestic.

In social terms, the most devastating effect probably involves the corrupt practices of governmental officials in dealing with foreign investment and foreign trade. This is reflected in the fact that, among the demands that the students in Tiananmen Square during the spring of 1989 put forward to the government to deal with, prosecution of corrupt officials assumed a prominent position.
On the other hand, the incident can be seen to a certain extent as the manifestation of the weakened political and ideological control that the party has over the mass, or in other words, the rising awareness of the public of their political right under the influence of one decade's openness. If the Cultural Revolution lost the CCP the people's sense of purpose, the 1980s posed a great question mark for the party's political morality and legitimacy.

The inevitable question is whether on all counts this policy has been worthwhile. Due to differences in criteria of worthiness as well as limitation of data, this becomes a highly subjective issue. As a conclusion, it may be suggested that, judged by whether the policy has achieved its economic objectives, it has been reasonably successful in the sense that it seems to entail no grave economic loss for China in partly attaining these objectives, although there is great room to make the policy more efficient.

*  *  *  *

This Chinese experience, especially related to Guangdong, may have useful implications for other LDCs attempting similar policies. The fact that a large portion of DFI in the province has taken place in the field of export-oriented manufacturing indicates that there is a real possibility for the development of similar operations in other LDCs, when foreign capital, technology, and management expertise can be combined with local labour resources under certain favourable conditions.

In this respect, it is interesting to note that the crucial factor in this development is the catalytic role played by low-level local governments and their close collaboration with foreign capital. This has been made possible by a number of factors: first, it is largely facilitated by the administrative and financial decentralization process and the fact that the Chinese local governments own a wide range of resources; second, the ethnic connection between some foreign investors, particularly those from Hong Kong, and the people at rural villages or small towns in their native places made it possible to forge relationships at that basic level.

Indeed, China's experience will also be interesting to eastern European countries as they also attempt to reform their economies and introduce
foreign investment. Although the premises of the reforms that have been undertaken in eastern Europe are fundamentally different from those underlying China's reform, at least two points of reference may be made:

First, it is often too easy during the reform process to rest great hopes on new ideas such as introduction of foreign investment. The foremost important lesson from the Chinese experience is that the implementation of this requires a great deal of political, financial and administrative commitment on the part of the host government.

Second, many expectations may turn out to be unrealistic. For instance, it may be expected that foreign investment can play a major role in achieving structural adjustment such as price reform. From what has been seen in China, foreign investment and the operation of FIEs do not push the pricing structure any closer to the desirable direction - a more balanced pricing structure. Instead they largely take advantage of the existing abnormality and concentrate in those products which promise the highest profitability.
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Dear Sir / Madam,

Hello! I am a Ph.D student from the University of London and doing research on "the determinants of the manufacturing foreign direct investment in Guangdong Province of the PRC". I understand your company has manufacturing direct investment* in Guangdong. Would you please kindly answer the following questions (You can either follow the Chinese version or English version) and return to me as soon as you can. Thank you very much for your help.

L. Zhang.

* "Direct investment" here includes equity joint venture, contractual joint venture and wholly-owned venture.

I. Firm Profile

1.1. Name of the firm__________________________________________________

1.2. The country (or region) where your firm is registered is__________.

1.3. Is this firm
   a). Independent? ( )
   Or
   b). Subsidiary of
       __________________________________________________________

If b), the country where the parent company is registered is_______
1.4. The number of employees that your firm hires in the registration country (or region) is _____, of which ______ are production workers.

1.5. The total number of factories that your firm owns or partly (at least 20%) owns abroad is _____

1.6. Profit derived from overseas manufacturing production accounted for____ percent of your firm's total profit in 1989.

1.7. Your firm's main products are

______________________________________________________________

1.8. Is any of your firm's major shareholders or managers originated from the Guangdong Province?

   No........................(   )
   Yes........................(   )

If yes, the name of the county or city where he or she is from is:

______________ city/county

2. Your firm's manufacturing investment in the Guangdong Province

2.1. The number of manufacturing ventures that your firm owns or partly owns in China is _____, of which _____ venture(s) is (are) in Guangdong. Please give the following details for the ventures in Guangdong:
Establishment
Order (Year) Form* Location Name of venture
1( )
2( )
3( )
4( )
5( )

(Please supply additional sheet, if there is more.)

*: "Form" here refers to: JV = joint venture; CJV = contractual joint venture; WOV = wholly-owned venture.

2.2. The total manufacturing investment (includes re-invested profits) of your firm in Guangdong is __________ HK$/US$

2.3. The total number of employees in your Guangdong factories is ___________; of which ____________ are production workers.

2.4. The number of technicians and managers that your firm hires from outside China to work in your Guangdong factories is ____________.

2.5. What were your manufacturing investments to Guangdong composed of? Please tick the appropriate ones (one) below.

- Machines and production equipments ( )
- Patent technology transfer ( )
- Right to use brandname ( )
- Technical materials ( )
- Personnel training ( )
- Cash ( )

2.6. What kinds of production are being carried out in your Guangdong factories? Please tick the appropriate one from below. (You may have more than one choice.)
a). Raw material or intermediate material imported processing and assembling, products exclusively or mainly for export ( )

b). Raw material or intermediate material imported, processing and assembling, product exclusively or mainly for domestic sale. ( )

c). utilizing local raw material, manufacturing complete products, products for both export and domestic sale ( )

d). utilizing local raw material, parts and components making product for both export and domestic sale ( )

e). others (please specify) ___________________________________________

3. Factors for Making Investments in Guangdong

3.1. Before investing in Guangdong, Yes No

a). Did you consider other Asian developing countries? ( ) ( )
If yes, the countries considered were:

b). Did you consider other provinces or municipalities in China? ( ) ( )
If yes, the places considered were:

3.2. Why does your firm invest in Guangdong’s manufacturing? What are the advantages that Guangdong has over the Southeast Asian countries as a manufacturing direct investment location? Please tick to select the four most important advantages of Guangdong.
3.3. How did you decide the specific locations of your manufacturing investment in Guangdong? Please tick to select the four most crucial factors influencing your decision over the investment locations.

- Infrastructure ( )
- Close to Hong Kong ( )
- Taxation concessions ( )
- Supporting industries ( )
- Wage level and land use fee charge ( )
- Relationship with the local government ( )
- The location of suitable Chinese partner ( )
- Close to your firm’s existing investments ( )
- Close to the hometown of some of your shareholders ( )

Others (please specify) __________________________________________

3.4. How did you find your Chinese partners? Please tick from below. You may have more than one choice.

- Met at trade fairs ( )
- Personal connections ( )
- Previous trading customer ( )
- Chinese partners approached you ( )
- Met at investment promotion conferences ( )
- Through Hong Kong-based brokers (middlemen) ( )
- Through Hong Kong-based Mainland Chinese companies ( )
- Previous partner of processing & assembling contracts ( )
- Via China International Trust & Investment Corp. (CITIC) ( )
3.5. Do you have any preference for the ownership type of your Chinese partners?

No..................( )
Yes....................( ) If yes, Please tick to indicate your preference below.

State-owned enterprises.................( )
Collective urban enterprises..............( )
Township enterprises.................................( )

3.6. Have there been any cases in which your firm abandoned investment plan(s) in China?

No ................................( )
Yes ................................( )

If yes,
The number of the cases is _____.
The considered locations were:

Please tick to give the reasons. You may have more than one choice.

Austerity Programme ...........................................( )
"6.4." Tiananmen Square Incident...........................................( )
Disapproved by the Chinese government.........................( )
Couldn't reach agreement over contract details...............( )
Dissatisfaction with technical level and management capacity of your Chinese partner.......( )
Dissatisfaction with the overall local investment environment...............( )

Others (please specify)____________________________________
3.7. What line of strategy is your firm following in dealing with manufacturing investment in China? Please tick to select from below.

Wait-to-see......................................................(  )
Expand investment in China......................................(  )
Maintain the existing ones, but no new investments...(  )
Gradually pull out the existing investments from China....(  )
Others(please specify)_______________________________

3.8. What do you think the three top problems that China has in attracting more manufacturing foreign direct investment? Please tick to give your opinions.

Rapidly rising costs...............................(  )
Bureaucratic red-tapes.................................(  )
Inadequate electricity supply
and transport facilities.................................(  )
Uncertain political and economic outlook..............(  )
Insufficient autonomy for foreign managers to
fire and hire workers and staff..............(  )
Restrictions on the foreign investment enterprises to
sell to the Chinese domestic market...............(  )
Inadequate raw material and components industries....(  )
Ideological Hostile view over capitalist foreign investors....(  )

Others(please specify)_______________________________

Name of the respondent________________________________

Position that you hold in your firm: __________________________
I. Profile of the Company

1.1 The company name

is________________________________________________

1.2. The place where the company is located is______county/ city proper.

1.3. The contracted total investment
   amounts to________ US$/HK$/RMB.  
   And the registered capital is _________ US$/HK$/RMB.

1.4. The company is :

   a. an equity joint venture;  (    )
   b. a cooperative joint venture; (    )
   c. a wholly-owned foreign enterprise (    )

   d. Others(please specify)______________________________

1.5. The shareholder(or sole owner) are (is) : (please list in a decreasing order of their equities.)

<table>
<thead>
<tr>
<th>Shareholders</th>
<th>Nationality</th>
<th>Equity(%)</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1.6. How is each equity composed of? Please give the following details:

<table>
<thead>
<tr>
<th>Components</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machinery</td>
<td>(      )</td>
<td>(      )</td>
<td>(      )</td>
</tr>
<tr>
<td>Transport facilities</td>
<td>(      )</td>
<td>(      )</td>
<td>(      )</td>
</tr>
<tr>
<td>Patent technology</td>
<td>(      )</td>
<td>(      )</td>
<td>(      )</td>
</tr>
<tr>
<td>Brand name</td>
<td>(      )</td>
<td>(      )</td>
<td>(      )</td>
</tr>
<tr>
<td>Cash</td>
<td>(      )</td>
<td>(      )</td>
<td>(      )</td>
</tr>
<tr>
<td>Premise</td>
<td>(      )</td>
<td>(      )</td>
<td>(      )</td>
</tr>
<tr>
<td>Land</td>
<td>(      )</td>
<td>(      )</td>
<td>(      )</td>
</tr>
<tr>
<td>materials</td>
<td>(      )</td>
<td>(      )</td>
<td>(      )</td>
</tr>
<tr>
<td>Others (Please specify)</td>
<td>(      )</td>
<td>(      )</td>
<td>(      )</td>
</tr>
</tbody>
</table>

1.7. The date when your company was officially licensed by the administration bureau of industry and commerce is _______________

II. Development of the Company

2.1. Was this company built out of an existing factory?
    Yes (      )
    No (       )

If yes, the ownership type of the previous factory was__________

The main products of the factory were_________________________

The main supplies came from_______________________________

The main markets for its products were______________________

2.2. Why is this new type of ownership desired? Please tick from below to indicate the three most important motivations.

   a. Renew machinery, introduce more advanced technology (      )
   b. Introduce more efficient management method (      )
c. Take advantage of tax incentive offered to foreign investment enterprises
   ( )
d. Expand export
   ( )
e. Gain more autonomy of management
   ( )
f. Eliminate the problem of inadequate capital
   ( )
g. Raise the income level of the employees
   ( )
h. Obtain the autonomy to import and export
   ( )

Others (please specify) ________________________________

2.3. Since the establishment of the present company, has any of your shareholders (or sole owner) expanded, or reduced, or withdrawn its investment in your company?

   Yes ( )
   No ( )

If yes, please give the details:

<table>
<thead>
<tr>
<th>Name of Shareholder*</th>
<th>Action type (E/R/W)**</th>
<th>Capital amount involved</th>
<th>Date</th>
<th>Reasons</th>
</tr>
</thead>
</table>

* or sole owner.
** E=expanded; R= reduced; W=withdrawn.

III. Production

3.1. The date when your company started its production is______________.

3.2. The main products of your companies are

__________________________________________
Are they the products that you have been producing since ever?
   Yes ( )
   No ( )

If no, please specify your main products in different years:

<table>
<thead>
<tr>
<th>Year</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>(19__)</td>
</tr>
<tr>
<td>2nd</td>
<td>(19__)</td>
</tr>
<tr>
<td>3rd</td>
<td>(19__)</td>
</tr>
<tr>
<td>4th</td>
<td>(19__)</td>
</tr>
<tr>
<td>5th</td>
<td>(19__)</td>
</tr>
</tbody>
</table>

3.3. Your company's revenue in 1989 was_______RMB/US$/HK$.

3.4. Did you export some of your products in 1989?
   Yes ( )
   No ( )

If yes, please indicate its percentage of your total output in terms of quantity and sales:

<table>
<thead>
<tr>
<th>Percentage of export</th>
<th>Name of products in quantity(%)</th>
<th>in sales value(%)</th>
</tr>
</thead>
</table>

The main export markets of your products were______________
The main domestic markets of your products were______________

3.5. By what channels did you market your products abroad? Please tick below. You may have more than one choice.

   a. Sell to your foreign partner(s) ( )
   b. Export commissioned to your foreign partner(s) ( )
   c. Export through the company's own channel ( )
   d. Others (please specify)____________________________
3.6. Do you use domestic raw or intermediate materials?
   Yes ( )
   No ( )

If yes, please indicate the percentages of domestic raw/intermediate materials among the three major materials being used in your production.

<table>
<thead>
<tr>
<th>Nature of material</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of material</td>
<td>(Raw/intermediate)</td>
</tr>
</tbody>
</table>

The main sources of your imported supplies are__________________
The main source of your domestic supplies are__________________

3.7. By what channels do you obtain your imported supplies? Please tick from below. Your may have more than one choice.
   a. Sold to the foreign partner(s) ( )
   b. Commissioned to the foreign partner(s) ( )
   c. Though the company's own channels ( )

Others (please specify)____________________________________

3.8. By what channels do you obtain your domestic supplies? Please tick from below. You may have more than one choice.
   a. Supplied from the State Plan ( )
   b. Supplied by the company's subsidiary(ies) ( )
   c. Purchased from the market ( )

Others (please specify)____________________________________

3.9. Do you have any subsidiaries or sister factories (i.e. the other factories owned by some of your shareholder(s) or sole owner)
producing raw or intermediate materials for your company at home or abroad?

Yes (  )
No (  )

If yes, please give the following details:

<table>
<thead>
<tr>
<th>Nature of Supply Source (Subsidiaries/sis. co.)</th>
<th>Nature of supply (Raw/intermediate)</th>
<th>Supplier's Location</th>
</tr>
</thead>
</table>

3.10. What were the composite of your sale revenue in 1989? Please indicate the percentage of following items:

<table>
<thead>
<tr>
<th>Items</th>
<th>Percentage(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials</td>
<td>(  )</td>
</tr>
<tr>
<td>Wages</td>
<td>(  )</td>
</tr>
<tr>
<td>Transport</td>
<td>(  )</td>
</tr>
<tr>
<td>Interests payments</td>
<td>(  )</td>
</tr>
<tr>
<td>Depreciation</td>
<td>(  )</td>
</tr>
<tr>
<td>Water and electricity fee</td>
<td>(  )</td>
</tr>
<tr>
<td>Tax</td>
<td>(  )</td>
</tr>
<tr>
<td>Income after tax</td>
<td>(  )</td>
</tr>
<tr>
<td>Others</td>
<td>(  )</td>
</tr>
</tbody>
</table>

IV. Employment and Management

4.1. The total number of your employees is_______, of which ________ are production workers; _______ are technicians; ________ are managerial persons.

4.2. The total number of your employees who are from outside China is______, of which, _______ are technicians; _______ are managerial persons.
3.4 The total number of your employees who are from the other provinces or municipalities is __________, of which, _____ are technicians; _____ are managerial persons.

IV. Recent changes

5.1. Compared with last March, how were the total sale and the use of domestic materials of your company in this March? Please tick.

<table>
<thead>
<tr>
<th>Change of This March over Last March</th>
<th>Total Sale</th>
<th>Use of Domestic Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>No changes</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>Decreased</td>
<td>( )</td>
<td>( )</td>
</tr>
</tbody>
</table>

Please indicate the respective changes for domestic sale, export, use of domestic raw materials and use of domestic intermediate materials:

Rate of changes over last March.

<table>
<thead>
<tr>
<th>Decrease(%)</th>
<th>Increase(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Domestic Sale</strong></td>
<td></td>
</tr>
<tr>
<td>in quantity</td>
<td>( )</td>
</tr>
<tr>
<td>in value</td>
<td>( )</td>
</tr>
<tr>
<td><strong>Export</strong></td>
<td></td>
</tr>
<tr>
<td>in quantity</td>
<td>( )</td>
</tr>
<tr>
<td>in value</td>
<td>( )</td>
</tr>
<tr>
<td><strong>Domestic Raw Materials</strong></td>
<td></td>
</tr>
<tr>
<td>in quantity</td>
<td>( )</td>
</tr>
<tr>
<td>in value</td>
<td>( )</td>
</tr>
<tr>
<td><strong>Domestic Intermediate Materials</strong></td>
<td></td>
</tr>
<tr>
<td>in quantity</td>
<td>( )</td>
</tr>
<tr>
<td>in value</td>
<td>( )</td>
</tr>
</tbody>
</table>
5.2. What plans do you have for the future? please specify.


Name of the respondent __________________
Post that the respondent holds in the company__________________________.
Date of reply________________________.

Appendix 1: World DFI flow: DFI in the Reporting Economies

US$b

<table>
<thead>
<tr>
<th>Year</th>
<th>World</th>
<th>LDCs</th>
<th>Asian</th>
<th>China</th>
<th>x1</th>
<th>x2</th>
<th>x3</th>
<th>x4</th>
<th>x5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>34.9</td>
<td>5.1</td>
<td>2.4</td>
<td></td>
<td>0.15</td>
<td>0.00</td>
<td>0.47</td>
<td>0.07</td>
<td>0.00</td>
</tr>
<tr>
<td>1980</td>
<td>46.8</td>
<td>12</td>
<td>3.4</td>
<td></td>
<td>0.25</td>
<td>0.00</td>
<td>0.29</td>
<td>0.07</td>
<td>0.00</td>
</tr>
<tr>
<td>1981</td>
<td>57.5</td>
<td>21</td>
<td>4.8</td>
<td></td>
<td>0.36</td>
<td>0.00</td>
<td>0.23</td>
<td>0.08</td>
<td>0.00</td>
</tr>
<tr>
<td>1982</td>
<td>49</td>
<td>24</td>
<td>4.6</td>
<td>0.43</td>
<td>0.49</td>
<td>0.02</td>
<td>0.19</td>
<td>0.09</td>
<td>0.09</td>
</tr>
<tr>
<td>1983</td>
<td>47.4</td>
<td>16</td>
<td>4.8</td>
<td>0.64</td>
<td>0.35</td>
<td>0.04</td>
<td>0.29</td>
<td>0.10</td>
<td>0.13</td>
</tr>
<tr>
<td>1984</td>
<td>51.8</td>
<td>15</td>
<td>4.2</td>
<td>1.26</td>
<td>0.29</td>
<td>0.08</td>
<td>0.28</td>
<td>0.08</td>
<td>0.30</td>
</tr>
<tr>
<td>1985</td>
<td>48</td>
<td>12</td>
<td>3.9</td>
<td>1.66</td>
<td>0.25</td>
<td>0.14</td>
<td>0.32</td>
<td>0.08</td>
<td>0.43</td>
</tr>
<tr>
<td>1986</td>
<td>76</td>
<td>12</td>
<td>4.9</td>
<td>1.88</td>
<td>0.16</td>
<td>0.16</td>
<td>0.40</td>
<td>0.06</td>
<td>0.38</td>
</tr>
<tr>
<td>1987</td>
<td>110</td>
<td>14</td>
<td>6.7</td>
<td>2.31</td>
<td>0.13</td>
<td>0.16</td>
<td>0.47</td>
<td>0.06</td>
<td>0.34</td>
</tr>
<tr>
<td>1988</td>
<td>158</td>
<td>15</td>
<td>6.9</td>
<td>3.19</td>
<td>0.09</td>
<td>0.21</td>
<td>0.46</td>
<td>0.04</td>
<td>0.46</td>
</tr>
<tr>
<td>1989</td>
<td>182</td>
<td>19</td>
<td>6.4</td>
<td>3.39</td>
<td>0.10</td>
<td>0.18</td>
<td>0.35</td>
<td>0.04</td>
<td>0.53</td>
</tr>
</tbody>
</table>

x1: LDCs' share in total DFI
x2: China's share in total DFI in LDCs
x3: Asian LDCs' share in total DFI in LDCs.
x4: Asian LDCs' share in world's total DFI
x5: China's share in total DFI in Asian LDCs.

The data for 1983 and 1984 is the average of the figures from the two, Because there is discrepancy between the two data.
millions of U.S. dollars

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hong Kong</td>
<td>995</td>
<td>18208</td>
<td>27540</td>
<td>57477</td>
</tr>
<tr>
<td>S. Korea</td>
<td>104</td>
<td>15722</td>
<td>27669</td>
<td>56447</td>
</tr>
<tr>
<td>Taiwan</td>
<td>187</td>
<td>n.a</td>
<td>n.a</td>
<td>55551</td>
</tr>
<tr>
<td>China</td>
<td>1021</td>
<td>8150</td>
<td>13380</td>
<td>34704</td>
</tr>
<tr>
<td>Singapore</td>
<td>338</td>
<td>10452</td>
<td>13317</td>
<td>29404</td>
</tr>
<tr>
<td>Brazil</td>
<td>134</td>
<td>7770</td>
<td>8911</td>
<td>16171</td>
</tr>
<tr>
<td>S. Africa</td>
<td>443</td>
<td>5166(1979)</td>
<td>4111*</td>
<td>15771</td>
</tr>
<tr>
<td>Mexico</td>
<td>165</td>
<td>3389</td>
<td>7129</td>
<td>11362</td>
</tr>
<tr>
<td>India</td>
<td>828</td>
<td>4117 (1979)</td>
<td>5890</td>
<td>10658</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>617</td>
<td>6570</td>
<td>8421</td>
<td>10095</td>
</tr>
<tr>
<td>Malaysia</td>
<td>75</td>
<td>2464</td>
<td>4404</td>
<td>9382</td>
</tr>
<tr>
<td>Poland</td>
<td>n.a</td>
<td>7403</td>
<td>8851</td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td>355</td>
<td>3322</td>
<td>4412</td>
<td>8277</td>
</tr>
<tr>
<td>Thailand</td>
<td>30</td>
<td>1886</td>
<td>2583</td>
<td>8219</td>
</tr>
<tr>
<td>Israel</td>
<td>281</td>
<td>4551</td>
<td>5212</td>
<td>8164</td>
</tr>
<tr>
<td>Turkey</td>
<td>11</td>
<td>782</td>
<td>3849</td>
<td>7464</td>
</tr>
<tr>
<td>Hungary</td>
<td>1053</td>
<td>n.a.</td>
<td>5866</td>
<td>6847</td>
</tr>
<tr>
<td>Indonesia</td>
<td>27</td>
<td>533</td>
<td>2365</td>
<td>5706</td>
</tr>
<tr>
<td>Philippines</td>
<td>43</td>
<td>2141</td>
<td>2534</td>
<td>4386</td>
</tr>
<tr>
<td>Pakistan</td>
<td>190</td>
<td>1285</td>
<td>1731</td>
<td>3010</td>
</tr>
<tr>
<td>Developing Cs</td>
<td>7984</td>
<td>147336 (est.)</td>
<td>177358 (est.)</td>
<td>380518</td>
</tr>
</tbody>
</table>

Note:
*: applies to the South African Customs Union, excluding intra-union trade.
Appendix 3. Guangdong's share in China's total DFI

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of approved FIEs</th>
<th>Amount of utilized DFI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>China</td>
<td>Guangdong</td>
</tr>
<tr>
<td>1979-82</td>
<td>909</td>
<td>657(72.3)</td>
</tr>
<tr>
<td>1983</td>
<td>452</td>
<td>432(95.6)</td>
</tr>
<tr>
<td>1984</td>
<td>1856</td>
<td>1213(65.4)</td>
</tr>
<tr>
<td>1985</td>
<td>3069</td>
<td>1724(56.2)</td>
</tr>
<tr>
<td>1986</td>
<td>1492</td>
<td>797(53.4)</td>
</tr>
<tr>
<td>1987</td>
<td>2230</td>
<td>1211(54.3)</td>
</tr>
<tr>
<td>1988</td>
<td>5940</td>
<td>2741(46.1)</td>
</tr>
<tr>
<td>1989</td>
<td>5784</td>
<td>na</td>
</tr>
<tr>
<td>79-88</td>
<td>15948</td>
<td>8775(55.0)</td>
</tr>
<tr>
<td>79-89</td>
<td>21732</td>
<td>na</td>
</tr>
</tbody>
</table>

Source:
The amount of DFI excludes CEs. The figures in parenthesis are Guangdong's share in percentage.
### Appendix 4: Localities' profile in Guangdong, end-1987

<table>
<thead>
<tr>
<th>No.</th>
<th>Locality</th>
<th>x1</th>
<th>x2</th>
<th>x3</th>
<th>x4</th>
<th>x5</th>
<th>x6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Guangzhou</td>
<td>48602</td>
<td>5120</td>
<td>2</td>
<td>1422475</td>
<td>0.16</td>
<td></td>
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Note: the localities are these which had been designated as open by the end of 1987.  

x1: utilized DFI (US$10,000), end-1987;

x2: economic distance from Hong Kong, measured by transport fee for a standard container (HK$). The data are obtained from Hong Kong Tractor Owners Association limited.

x3: closeness, measured by the timing when it was opened. The more later the time was, the higher value it is.

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x4: GNP (RMB 10,000) of 1987

x5: annual growth rate of gross industrial and agricultural output between 1983 and 1988, at fixed price.

x6: the amount of utilized external loan (US$10,000), end-1987.
Appendix 5: No. of reported vacancies in HK’s manufacturing
(4th quarter of each year)

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## Appendix 6:

### US$m

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No. 9 is omitted, since it is not a manufacturing establishment.

x7: Capital intensity, derived from x7 = x1/x2.

x6: Export ratio, measured by percentage of sales value, except No. 3, 6, 14, 24, 25, which are by volume.

x5: Capital productivity, derived from x5 = x2/x1.

x4: Labour productivity, derived from x4 = x3/x2.

x3: Number of employees.

x1: Total registered capital (US$10,000), including Chinese contribution.

ID: FIE identity.

"Origin" refers to that of the foreign partner(s) in the FIE.

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### Appendix 8. Manufacturing: distribution of investment of listed EJVs (1979-1987) in Guangdong (US$m)

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Note: CDFI: contracted DFI; CCI: contracted Chinese investment; CTI: contracted total investment
311-312: food manufacturing
313: Beverage industries
314: tobacco manufactures
321: manufacture of textiles
322: manufacture of wearing apparel, except footwear
323: manufacture of leather and products of leather, leather substitutes and fur, except footwear and wearing apparel
324: manufacture of footwear, except vulcanised or moulded rubber or plastic footwear
331: manufacture of wood and wood and cork products, except furniture
332: manufacture of furniture and fixtures, except primarily of metal
341: manufacture of paper and paper products
342: printing, publishing and allied industries
351: manufacture of industrial chemicals
352: manufacture of other chemical products
353: petroleum refineries
354: manufacture of miscellaneous products of petroleum and coal
355: manufacture of rubber products
356: manufacture of plastic products not elsewhere classified
361: manufacture of pottery, china and earthenware
362: manufacture of glass and glass products
369: manufacture of other non-metallic mineral products
371: iron and steel basic industries
372: non-ferrous basic industries
381: manufacture of fabricated metal products, except machinery and equipment
382: manufacture of machinery except electrical
383: manufacture of electrical machinery apparatus, appliances and supplies
384: manufacture of transport equipment
385: manufacture of professional and scientific and measuring and controlling equipment not elsewhere classified, and of photographic and optical goods
390: other manufacturing industries.

### Shift of Capital distribution and efficiency in China

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PTPC: profit plus taxation per 100 yuan capital
LP: labour productivity, measured by gross output per worker per year (yuan)
C: change in the region's share of basic construction in China from the Fifth Five-year Plan period to the Sixth Five-year Plan period

Source: SSB, ZGZTZ, and ZTN.
Appendix 10:
China's exports and official exchange rate, 1980-1990

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Note: yearly average exchange rate.