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**THE ROLE OF SPECIAL ECONOMIC ZONES
IN CHINA'S DEVELOPMENT**

**A research project in partial fulfillment of the requirements for the degree of
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ABSTRACT

Most economies of East and Southeast Asia have used export processing zones (EPZs) or special economic zones (SEZs) in their first stage of economic liberation programs. Many authors believed that these EPZs generally decreased welfare or had only a limited welfare-raising effect on the host country. However, by examining the role of SEZs in China's development, this study has concluded that China's SEZs have taken on a leading role in the process of economic reform, and have been important bridges over which foreign capital, technology, goods, management and ideas have crossed into the hinterland of China and over which the products of the hinterland have gained access to world markets. SEZs have been important economic laboratories in which some of the features of Western Capitalism could be tried out and when found appropriate to Chinese conditions, allowed to cross the bridge into the rest of China. They have also had a long-term effect on growth and development.

This study has shown that changes in ideology and human capital development are more important than technology and capital because effective utilization of physical resources depends on human resources. This study has also shown that SEZs will continue to play the role of economic laboratories since inner China still features a centrally controlled and managed system and experiments with market mechanism are still at a very early stage.

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Chapter I

Introduction

I-1. Background

Since the middle of the 1960s, several developing countries and areas in the Asia region have adopted various strategies to develop production and accelerate their industrialization and modernization process. One important form of such development promotion efforts was the establishment of export processing zones (EPZs), which are variously styled as free port zones, duty-free zones, free economic zones or special economic zones.

EPZs originated from the free ports of countries in Medieval European. The first free area was in Leghorn, a port in the Bay of Genoa, in north-west Italy. It was named as a Free Port in 1547 (Rolf, 1991). Since the 17th century, free ports and free trade areas gradually appeared in some European cities like Hamburg and Bremen (German), Copenhagen (Denmark), Dunkirk (France). The main functions of these free trade areas were processing and storage of products, allowing exhibition, selection, classification and repackaging in the areas, free of duty. But these functions would not influence the customs goods' classification and tax rate. From the 17th century to 19th century, foreign trade mainly transited other countries' goods. Under this situation, the development of country's economy did not rely on domestic industry and products for export, but on its level of international trade. During this period, local legislation and tax system in these countries blocked the development of international trade. In order to attract foreign goods, expand transiting trade and promote local economic

development, free trade areas appeared in terms of geographical advantage and the position of international trade.

During colonial time, colonists also set up free trade areas in their colonies. For instance, British and France set up free ports in Gibraltar, Singapore, Hong Kong, Penang, Aden and Djibouti (ESCAP, 1985). In the 1930s, America began to establish Free Trade Zones that were some different from those before and had some new characteristics. International businesses were able to not only store, classify and repackage products, but also process and manufacture in the zone without customs duty, for example changing the name, shape and use of the products and their custom classification and tax rate. The original free trade areas had been given manufacturing and more commercial functions to their roles.

The first zone with EPZs' features was the Irish Shannon Free Trade Zone. Due to the business decline of the Shannon International Airport in 1959, the Irish government decided to set up a free trade zone in airport in order to attract foreign investment and take place the jobs lost. In 1960 the free trade zone started to operate (Papadopoulos, 1985). This kind of zone synthesizes characteristics of both free trade areas and industrial manufacturing areas.

The now typical EPZ was born in Taiwan. In 1966 Kaohsiung Export Processing Zone was established in Taiwan. It was the first use in history of the formal name "Export Processing Zone". A rapid increase in EPZs has occurred in 1970, there were 11 located in 9 countries; By 1981, 34 developing countries operated 96 zones (Basile&

Germidis, 1984). By the middle of 1980s there were more than 400 Free Trade Zones in the 70 countries (Miyagiwa, 1986). If current trends continue, free trade zones may soon account for as much as 20 per cent of world trade (Papadopoulos, 1985), this has important implications for economic development.

EPZs can be generally defined as a special enclave, outside a nation's normal customs barriers, within which investing firms, mostly foreign, enjoy preferential treatment. Goods entering the zone can be processed stored and manufactured without payment of customs duties and local taxes, and exported without payment of duties. These privileges are subject to the conditions that almost all of the output produced is exported and that all imported intermediate goods are utilized fully within the zones or re-exported. In addition, firms established in the Zones are accorded freedom from various restrictions and regulations applying elsewhere in the country, and also enjoy the infrastructure established by the host country. Most countries also provide a wide range of fiscal and financial incentives to firms locating in them. For example, tax holidays of up to five or even ten years, generous depreciation allowances, and exemption from wages and welfare legislation are characteristics features of EPZs in Asian countries. The main objective of setting up EPZs in some Asia countries and areas is to attract the foreign capital and technology to establish modern industries, create more job opportunities, develop the trade with foreign countries and speed the development of the national economy. There are two characteristics within EPZs, first, it is an enclave enjoying a status that does not extend to the whole territory of the country; second, enterprises established there must export their production. It is obvious that this would exclude from our definition of the free ports of Hong Kong

and Singapore, which do not fulfill the first condition, as well as the free zones set up in the United States which do not fulfill the second (Car Goderez, A World Bank Staff Working Paper on Export Processing Zone, pp. 7-8, 1981).

It is well known that some East and Southeast Asian countries and areas grew more rapidly and more consistently than any other group of economies and also have been one of the most dynamic economies in the world from the middle of 1960s. Most economies of East and Southeast Asia have used export processing zones in their first stage of economic liberation programs, for example, Taiwan in 1966, South Korea in 1971, Malaysia in 1971. Hong Kong and Singapore themselves are the free trade area and country.

At the same time, China still was one of the most isolated socialist countries in the world. China had little contact with the outside world. At the beginning of China's open door policy, there was strong resistance to the permeation of foreign investment. The leaders of China's government carefully adopted the concept of economic zone by the encouragement of success of EPZs. As the result of this situation, four Special Economic Zones (SEZs) were set up in the south-eastern provinces of Guang Dong and Fu Jian in 1980. The four SEZs are Shenzhen, Zhuhai, and Shantou of the Guang Dong province, and Xiamen of the Fu Jian province, later Hainan was set up in 1988. As the encouragement of the success of open door policy, China has pushed its economic reform to the center of the country's largest economy- Shanghai, and Pudong new area was set up in 1990.

The growing popularity of EPZs is no doubt stimulated by the initial success of some EPZs in Taiwan, South Korea and Malaysia. Many countries still continue to set up EPZs. It is important or significant to analyze the role of EPZs in the process of development and what weightiness can be put on EPZs in the development of these countries. This research will concentrate on the study of China's SEZs development, and intend to answer the questions: why China set up SEZs, what is the role of SEZs in China's economic development.

I-2. Research objectives and arrangement

In order to answer these questions, this research will be divided into five chapters: this first chapter has introduced why these questions are important to examine and the methodology of this research. In recent studies, experts have done some research of the EPZ's role in Asian development, and even posed the negative role they can play in host country's development. It is well known that China's SEZs was based on the experience of other EPZs. It is necessary, therefore, to review the background of establishment of EPZs, and their role in other Asian country's development, this is done in chapter 2. Under the encouragement and success of some East Asian development, China government began to open its door around the end of 1970s and set up the SEZs, chapter 3 will describe the background of establishment of SEZs in China and its open door policy. The establishment of SEZs has played a very important role in China's market-oriented economic development in the last decade, specially in Southeast China, but the rest of China still does not reflect a market-oriented economy. Pudong New Area was set up under this condition. Chapter 4 will describe

the background of the establishment of Pudong New Area, what does China's government expect, and the role of SEZs in China's future development. Chapter 5, the conclusion, will analysis on China SEZ's role in economic development, and, finally, make some suggestions for China's open door policy and the operation of SEZs.

I-3. Methodology

A literature research has been done through various sources over the research period, for example, reviewing existing research data, finding monographs, searching the literature for relevant existing theory in relation to the problems being discussed. Library research has done in this research, for example the use of footnotes in books and journals, the indexes of journals, specialist dictionaries, abstracting services, citation indexes and subject bibliographies, and other information system, like ABI information system, Uncover system, First research system and Interloan service.

This research is mostly conducted using secondary sources. These secondary sources include official statistics, official report, World Bank report and the data published by other authors. The secondary sources and data provided both ideas and data relevant to the problems being investigated. These secondary sources have also provided valuable guidance as to how to design the research, and suggest strategies for the data analysis, and answer the questions. Both quantitative analysis and qualitative analysis were used in this research.

Chapter II

A literature review of the assessment of export processing zone's role in host country's development

II-1. The background of establishment of export processing zone in host country and its role expected

It is a complex matter to select effective strategies for industrialization in developing countries, which have experienced different development period. Up to the economic crisis of the “great depression” in 1929, any process of economic development seemed to postulate the export of manufactured goods. During the “great depression” period, most developing countries experienced a sudden drop in their exports, substantial outflows of capital, and a sharp deterioration in their terms of trade with the outside world. This is a mark of a breaking-point for export of manufactured goods (Basile & Germidis, 1984). The Second World War made the export situation worse since traditional supplies were destroyed and productive transfer was going to be uncertainties. The countries concerned with the export of manufactured goods found a big difficulty to develop their production. Moreover, the fall of the demand in international market for most of their primary products that they exported made these countries involved in the increasing of their indebtedness and the decreasing of their import-financing capacity (World Bank, 1994).

After the Second World war, it is not difficult to understand that most of the developing countries transferred their development policy of exporting manufactured goods quite naturally to import substitution that was considered a realistic development policy. This policy was systematically applied to developing countries

from 1950. This trend was also due to the change of development theory, which is that developing countries concerned to free their production from strong dependence on the outside world after World War II. It was widely thought that a best alternative policy of economic development was to protect their infant industry along with an industrialization. During the first decade after World War II, this re-orientation of industrial policy was questioned due to setbacks (James,1989). The main reason was that this industrialization process was accompanied by replacing imported manufactured goods with domestic production protected from foreign competition by tariffs and other means. This means the increasing in imports of intermediate products and capital goods and the reducing in imports of manufactured goods, particularly in consumer goods. The result of the development showed that it could have the serious drawback of unsound and non-competitive industrial structures, and also led to considerable pressure on the balance of payments in the developing countries. In the middle of 1960s, the failure of any industrial policy based on import substitution is manifest (ESCAP, 1985).

At the same time, the success of Hong Kong and Singapore as free trade areas inspired some governments in developing countries to initiated policies designed to stimulate exports of non-traditional manufactured goods (Warr, 1989). One form of such export promotion efforts has been the establishment of export processing zones. Taiwan and South Korea were to establish export processing zones during the late 1960s and early 1970s. The establishment of Free Export Processing Zones is intended to attract international industry to these areas in which goods may be imported freely without the payment of customs duties and processed for export markets with a minimum of

restrictions. Along with the experience of Taiwan and South Korean, which export-oriented industries had been established and have succeed in becoming competitive and capturing world markets. Their experience has given strong encouragement to the search for means to attract foreign industry and develop economy in developing countries. Moreover, their success in turn prompted the construction of export manufactured policy in other East and Southeast Asian countries (Rondinelli, 1987).

The key effect for the great growth of EPZs was also a 1967 United Nations resolution to the setbacks of economic development in developing countries, which was to transfer development policy of import substitution to export development as the preferred method for industrialization (Papadopoulos, 1985). In addition, in the early 1970s, Japan's relaxation of restrictions on investment abroad led to competition among Asian countries hoping to attract Japanese and other foreign investors (Warr, 1989).

Consequently it was not surprised that the developing countries had turned resolutely to an export-oriented industrial policy. And very soon for most of the Third World countries foreign trade became the mainspring of any industrial strategy. The increasing interest taken by many developing countries in policies to attract export-oriented investment is promoted by a dual concern. The aim is on the one hand to attract foreign investment, which is expected to provide foreign outlets, create jobs, transfer technology and know-how, generate inflow of foreign exchange, on the other hand, to promote a whole process of specifically national industrialization in a protected domestic market (ESCAP, 1985).

This new industrial policy orientation of the developing countries was mainly based on the availability of a plentiful supply of cheap labor. The countries that had the greatest success in this new path were those which could recruit plenty of disciplined workers, drawn from an agricultural sector that had prospered through rationalizing and modernizing farming techniques. The new industrialization policy orientation followed by the developing countries in no way implied less State interference than in the import substitution process. State action simply followed other channels. Intervention was henceforward mainly at the level of infrastructures, incentives to enterprises playing a leading role in the industrialization process, differentiated or selective openings for foreign investment, redefinition of customs and trade policy objectives, sound management of the labor force.

II-2. The assessment of EPZ's role in the development of host countries

Ever since the establishment of the EPZs, numerous studies and research have been carried out on EPZs. Many of these studies tend to focus on the general dimensions of EPZs of which we now quite a lot, but the analysis of EPZ's role in host countries' development has remained an uncompleted study and a gap. Fortunately a few studies have been conducted in recent years by some researchers. The studies of the analysis of EPZ's role in host country's development have experienced three stages although they are overlapped over time.

First, the pioneering analysis of the EPZ's role in host country was done by Hamada (1974) and Hamilton and Svensson (1982). The focal point is the decreasing in the

final good price because of the removal of tariff protection. The good price will be lower than that in the domestic market that is protected. The benefit of production within EPZ will be reduced since the goods are mainly used to export. Domestic firms will choose not to invest in the EPZ and foreign firms must be willing to accept a lower benefit than that offered in the domestic sector. The creation of an EPZ hence discourages rather than encourages foreign investment (Balasubramanyam,1988). This study gave a conclusion that the introduction of the EPZ is harmful to the host country. Later, Miyagiwa (1986) emphasises the abolition of tariff on imported intermediate goods used in EPZ and reduction of taxes in profits, and argued that these features tend to encourage foreign investment in the EPZ. Miyagiwa made a conclusion that EPZ plays a crucial role in determining the change in welfare following economic growth and foreign investment.

The second stage of these studies was mainly concerned with the large investments in publicly supplied infrastructure and major tax concessions that have been provided in EPZ and questioned whether this investment has been worthwhile. It is well known that the aims of the establishment of EPZs are expected to promote industrial development, help to reduce unemployment and assist in the transfer of technology. However, some researchers suggest that these aims may have been over-emphasised, and have not been achieved. Most of EPZs primarily employs low-wage, unskilled female labor, which means to create an unstable employment base. There is little transfer of modern technology or know-how from EPZs to host countries, and also have weak links between domestic manufacturers and EPZ's production. The negative impacts of these EPZs are appeared in different way in different country. Most of EPZs

has high construction and maintenance costs. Large EPZs may produce unexpected in-migration from rural areas, lead to more dependence on companies owned by foreign capital. Along with the increasing of wages and the reducing of preferential conditions, these companies often tend to move to other EPZs whose conditions are more favorable (Rondinelli, 1987).

The typical study at this stage is cost-benefit analysis as conducted by Peter Warr (1984, 1987), later by McIntyre (1996) and other researchers. Warr has not only provided a framework for the assessment of the benefits and costs of EPZs, but he has also estimated the returns to public investment in establishing EPZs in South Korea, Malaysia, Indonesia, and the Philippines. EPZs in South Korea and Malaysia shown to have brought substantial benefits while the EPZs in the latter two countries have largely failed to provide any net benefits. Warr thought that governments established EPZs in the early 1970s invariably had three objectives: foreign exchange earnings, employment, and technology transfer. The first two objectives were met. The zones contribute significantly to the employment of unskilled and semi-skilled workers. The conversions of foreign exchange into the domestic currency that were necessary to pay these workers contribute to the host countries' foreign-exchange earnings. He points out that EPZs have contributed to the country's economic welfare mainly through their absorption of unskilled and semi-skilled labor, the overall welfare impact of EPZs on the host economy is beneficial but limited.

First, Warr thought that the zones are basically as a place for attracting some economic activities, firms that are mobile and often called "footloose", and their capital equipment

into the host country. Within the EPZs the imported capital goods are combined with domestic labor to produce export goods that the firms sell to overseas. These firms try to invest their capital to the countries in which they can earn the highest rate of return. Because the production within EPZs is labor-intensive. The profit of labor-intensive production mainly relies on the unit labor costs. As the result, cheap labor becomes an increasingly important determinant of the international location of this production. It is to be noted that most of the exportable produced in the zone are relatively intensive in the use of labor, and the employees in the zone are mostly females.

Second, one of the anticipated benefits was the technology transfer and the increasing linkage between EPZs and domestic production. It is expected that EPZ firms would gradually increase their purchase of local raw materials, components, semi-finished goods, and machinery. This interaction with the local economy would benefit domestic firms through technology transfer (McIntyre, 1996). The record has been disappointing. Local raw materials typically comprise no more than a third of total raw material use, and often much less. In Malaysia (Warr, 1987), local raw materials comprise only a small percentage of total raw material use; purchases of raw materials and intermediate goods produced by other EPZ firms are more than three times as important. Managers of EPZ firms report that the main obstacle to purchase of local raw materials is their low and unreliable quality

EPZs are generally isolated from the domestic economy. It has generally come to be recognized that the substantial gains from technology transfer that were initially sought have not occurred. It had been hoped that the commercial contacts between EPZ firms

and their domestic supplies would lead to the benefit of domestic firms. Of course, only a few industries in EPZs possess technology that is not universally available. Those that do possess new technical information, electronics firms being the best example, guard this information carefully, even from their own workforces. Technical information is a valuable corporate asset and some of the firms' competitors are generally producing within the same EPZ.

The benefits from export processing zones are limited. They are definitely not 'engines of development'. For countries in the early stages of development, the zones can provide an efficient and productive means of absorbing surplus labor. Even then, the zones could never be expected to provide more than a modest part of the solution to the vast employment problems of these countries.

Along with the economic development and industrialisation, and the surplus labor in the earlier stages of industrialization is absorbed, interest in EPZs has tended to reduce. This transition also accompanies with rising labor costs (Clifford, 1990). For example, Taiwan, and south Korea, pioneers in the establishment of EPZs in the late 1960s and early 1970s, have recently become considerably less interested in this type of economic development.

The emerging endogenous growth theory, which emphasizes the role of externalities like learning-by-doing and on-the-job accumulation of human capital as important factors in the economic growth process, has led to the third stage to analyze the

possible welfare implications of EPZs. These aspects have previously been disregarded in most EPZ studies.

Human capital accumulation has been a significant contributor to the miracle of economic development and growth in the East and South-east Asia (Lucas, 1993). Labor through on-the-job training in the productive line results in the change of labor skill from less advanced to more sophisticated production. EPZs can give a first impetus in this direction by stimulating a country previously unaccustomed to non-traditional manufacturing to industrialize and produce for the export market (Hughes, 1995).

Before EPZs brought exports to LDCs that led to industrialization, domestic firms often lack ability to package technical, marketing and managerial know-how with internal and external resources, and furthermore, seldom have access to international distribution channels (Johansson, 1994). Multinationals investing in the country therefore play an important role, since they bring in not only scarce capital and know-how but also experience and ability to produce for the export market. They act as pioneers, triggering the export supply response through the establishment of affiliates and collaboration with local firms (Rolf, 1991).

An additional role is to get an initial entry on to the world market. The multinational corporations already have an established international network, and joint ventures with them facilitates the local entrepreneurs' entry to the world market. Along with the

export incentives, policy reforms to facilitate exports are undertaken and further economic reforms are induced in host country.

Moreover, EPZs have forced the host countries to raise the level of industrialization. The shift in the nature of EPZs themselves can be attributed to an inevitable sequence of events over about the last 20 years, which resulted in higher wages. As wages rise in the original zones, their tenants- aptly called “footloose industries”, mainly textiles and electronics firms- keep switching production locations in search of cheap labor. This has brought on three distinctive waves of EPZs: from countries and areas such as South Korea and Taiwan, to the Malaysia and Thailand, and then to Indonesia and the People’s Republic of China countries (Kim Jin-moon, 1991). As new zones open up to accommodate footloose industries, the old host countries are switching to modern high-wage but capital-intensive zones, which are directly competitive with those in western.

In general, an EPZ is like a bridgehead. The host country used it to practice and accumulate experience so that it could be lead export-oriented manufacturing to develop in the nation and then transplant that experience to other industrial areas. Meanwhile, through this bridgehead, foreign investors could understand local affairs and be familiar with the investment environment, which would help them expand their businesses in the host country. EPZs are the outcome of government policy towards the changes of global economy and the restructuring of development in the host country. The EPZs in these countries have had an impact on the transfer of the national

economy from import substitution to export orientation, and moreover, an important role in free trade economy in the world (Papadopoulos, 1985).

Warr in 1989, 1993 also thought that export processing zones exposes the domestic business community to examples of internationally competitive industrial enterprises and this demonstration effect is undoubtedly valuable, especially in the early stages of industrialization, as are the externalities arising from the on-the-job training of local middle-level managers. This development policy has created a liberal economic environment conducive to export-oriented development in whole country.

As a result, the success of the liberal economic environment existing within EPZs provides a great deal about the nature of the economic environment outside the zones in the countries establishing them. EPZs have been successful in attracting new foreign investment, earning foreign exchange, generating employment, etc.. Warr gave a conclusion that two kinds of lessons can be drawn. Within a partial context, something is revealed about the utility of the export processing zone concept itself: EPZs can make a limited contribution to economic development, especially in the early stages of industrialization. Within a broader context, the most significant contribution that EPZs can make to the development process is that the demonstration of the economic gains that could be achieved from a more general liberalization for the whole country. The EPZs could reveal about the degree to which restraints on trade, unnecessary bureaucracy and restrictive regulations have inhibited and continue to inhibit economic activity outside the zones in host country, and help to remove the restrictions of

economic development. In short, the very success of EPZs points to the benefits that a more liberal economic environment could make possible within the domestic economy.

It is, therefore, timely to examine the performance of China's Special Economic Zones more closely, and answer the question of what their role is in China's development.

Chapter III

The role of special economic zone in China's economic development

III-1. The background of the establishment of special economic zone

Since 1949, the China's economy has been closed to international relations and has been a self-sufficient economy. China's open door policy on foreign investment and trade, initiated in the late 1970's, began a movement away from the position of that traditional self-sufficient economy.

Former prime minister Zhou En Lai proposed to set up some special areas in China, where export facilities would be built for light manufactured goods in the early 1960s, however, it was not actually put into operation (Osborne, 1986). In 1977, China conservative leaders still declared that China would not receive any international loans, foreign assistance or direct foreign investment. Chinese officials still regarded export promotion zones in many developing countries as a manifestation of new colonialism. They thought that China should not copy them.

It was not to carry out the policy of opening up to the outside world and invigorating the domestic economy until the Third Plenary Session of the Eleventh Party Central Committee in 1978. Much discussion of the open door policy has taken place within the media and among economists in that time. The main feature during that time was to begin to break through the traditional ideas of closing the country to international economic relations. It became clear that the closing door policy had made China isolated from the international economy and technological development, and China's

economic development could not rely only on China's own accumulation. China must be opened up to the outside world and absorb what is useful from outside world. It is necessary to bring new ideas and transfer technology from the outside world, which are suitable for China's situation and development.

The reform movement in China actually experienced a long procedure of debate about concerning the role of foreign investment in China, and the opening of the country to a foreign economic presence. Conservative leaders argue that foreign investment might make China more vulnerable to outside political and economic influence. Conservative leaders evaluated the open door policy as channels of deviation from the socialist goals of China. Their influence is an important factor for reformers in Beijing.

The reformers had to make efforts to convince conservative leaders that open door policy would help China earn foreign currency and relieve domestic budget deficits with the inflow of foreign investment. Two years later, as the result of the debate between economic reformers and conservatively center planners, China began a policy of opening up to the outside world.

The reformers were happy with special pilot areas for experimenting with economic reforms due to their lack of knowledge of international market and economy. Deng Xiaoping expressed his idea about setting up special economic zone from two views in 1978: first, that some people and some regions should be encouraged to get rich to set examples for others to emulate; and second, that China must open itself to the outside world to absorb advanced foreign technology, managerial experience and capital.

Moreover, under the pressure of the conservative leaders, Deng needed a pilot zone to experiment market-oriented economic reforms, accumulate experience and build up his own authority on economic matters. Since then China has transformed into the policy of opening up to the outside world and developed a planned market economy according to Deng's words. One of the important open-door policies is the establishment of the Special Economic Zone (SEZ) in several small areas along the coast that exposed China to the challenges of competition in new technology and international markets.

In general, the economic environment in China could not provide individually and privately economic development for the whole country at that time. The open door policy has to put into practice from some smaller areas to larger areas, and at last to the whole country gradually. It is necessary to set up such zones its territory can provide an attractive enough base for some foreign firms looking for production bases for international sales.

III-2. The aim of the establishment of SEZs in China.

China aims its special economic zones as 'a special role' of economic 'laboratories'. The SEZs are viewed as areas in which foreign investors and also domestic investors will be encouraged to set up industrial production and other economic activities like banking, exporting and importing under the policy environment based much more on market mechanisms and more liberal environment than is available in the rest of the economy. China's authorities and enterprises in the hinterland can closely examine the

experiments on foreign investment, foreign management techniques and foreign technology, and the general awareness of the development they encourage in market economies. By using the SEZs as the windows in this way, the hinterland authorities and enterprises can decide which experiments could be useful to move over the bridge into the greater Chinese economy. Furthermore, the zones helped to serve as focal point for investment from both domestic and foreign sources and allowed China to develop links with the world market, facilitated by Hong Kong, Taiwanese and other foreign entrepreneurs

China's SEZs are also viewed as an integral part of the Chinese policy of opening to the outside world for the purpose of strengthening economic reform and the direction in the Chinese approach to development. For example, within the SEZs, some loosening of government controls can be tried and market-oriented economy can be identified. Moreover, China also regarded its SEZs as comprehensive zones aimed at promoting regional development. The goals are to open parts of the national economy to the international system of trade and finance, develop external economic co-operation and technical exchanges around these areas.

Except for the description above, China's SEZs are similar in intended role to export processing zones in other countries. The open door policy was expected to provide China with a range of benefits including access to modern technology to improve the efficiency of its antiquated industry and infrastructure. There are many problems faced China to carry out its open door policy, such as the insufficient and imperfect of fundamental facilities: energy resource, communications and telecommunications, and

also lack high advanced technical management and personnel. The aim of establishing SEZs is to attract foreign investment, set up manufacturing and international business, and produce the transfer of high technology to China. For example, Chinese enterprises can form joint ventures within the SEZs with foreign partners. The feedback can be hopefully created during the operation of the joint ventures. The foreign technology could be absorbed by joint venture firms and subsequently incorporated into the rest of China. New production and management techniques can be absorbed and transferred inland later on.

It also aimed to create employment for its rapidly growing population, and promote export industries to earn foreign exchange. In general, it means to allow SEZs to experience international business and technology, and accumulate experience in order to promote economic development more effectively by the introduction of western technology and management techniques.

III-3. The difference between China's SEZs and those in East Asia.

Although the apparent early establishment of the SEZs originated from a conceptual expansion of the model of Southeast Asian export processing zones, SEZs in China are different and more ambitious in terms of social, political, and physical dimensions.

There is one fundamental difference between the special economic zones of China and the export processing zones of other countries. The export processing zones of other countries are set in the context of capitalist economic systems and only represent a

localized deepening of the liberal economic approach. This difference in setting is important as while the former can be seen as an acceleration of the liberalization process that is inherent in current Western style capitalism, the latter is usually seen as being the exact opposite of sort of private enterprises venture the zones are intended to cultivate. In this sense then, the special economic zones are serving a political function, as a laboratory for trying out a different politico-economic system: the market approach to development for China (Wall, 1988). SEZs allowed the government to test new policies before applying them to the domestic economy as a whole. The SEZs functioned as China's early windows on the world, the vanguard in an overall effort to change the planning mechanisms of the socialist economy and introduce modified forms of market economies. China's SEZs are established to provide a means of integrating China into the world economy

The experimental role of the special economic zone is an important feature that is different from export processing zones in other countries. It is given as the reason why they are all on the coast and isolated areas away from existing centers of dense population and urban development and, except for Xiamen, without well-developed port facilities. Among 1979 and 1980, four special economic zones were established in Shenzhen, Shantou, Zhuhai and Xiamen, in the southeastern provinces of Guangdong and Fujian. All of them were economically poor and weak in human resources and infrastructures. Since the top-level decision makers worried about any possible unfavorable political and economic consequences from this open door policy, Special economic zones all were set up in areas far away from the political and economic centers of China, particularly away from the northern industrial heartland of China.

The leaders in China did not know what kind of developing way would be suitable to China's economic development at the beginning of China's open door policy. The cautious policy-makers chose special economic zones as laboratories and hoped to be able to prove whether this kind of reform fitted into the Chinese political and economic environment or not. If it failed, it would not influence on the rest of China's economy greatly, and also the problem would be identified and avoided elsewhere in China. The special economic zones were the main places visited by China's center leaders to evaluate special economic zone's policy, and later studied and learned by local government's leaders. Paying attention to ideological sensitivity in every step of the reform process is one characteristic of the Chinese reformers in their efforts to avoid ideological or political confrontation with the conservatives and speedily get the reform project off the ground.

Other significant differences between the special economic zones and traditional export processing zone is their size and the range of activities within special economic zones. The Shenzhen zone covers 32,750 hectares (ha), the Zhuhai zone 12,100 ha, the Xiamen zone 13,100 ha, and the Shantou zone 23,400 ha. These compare to the 384 ha of the Kandla export processing zone in India, the 345 ha of the Bataan zone in the Philippines, the 202 ha of the Katunayake zone in Sri Lanka and the 175 ha of the Masan zone in the republic of Korea (ESCAP, 1985). Whereas foreign investors in export processing zones are usually restricted to export manufacturing industry, the Chinese special economic zones allow them to establish service industries including tourism, commercial real estate development and even commercial farming. They are

some way away from the specialized industrial estate concept of export processing zone.

Additionally, China's SEZs are also partly motivated by other considerations. Shenzhen and Zhuhai are on the borders of Hong Kong and Macao respectively, Hong Kong is one center of international economic activity. It is expected that the gap between Hong Kong and the rest of Guangdong will be reduced by developing the Shenzhen SEZ's economy. The Shenzhen and Zhuhai SEZs are a part of a long-term strategy to intensify the process of economic development and stabilize relations with Hong Kong before Britain and Portugal hand over administration in 1997 and Macao in 1999 respectively. It is hoped to contribute to the return of Hongkong and Macao. Xiamen faces Taiwan directly. It is hoped to set up a special relationship between them and contribute to the unification of mainland China and Taiwan. The creation of the SEZs has a political as well as an economic objective. Moreover, Xiamen and Shantou are the home of many millions of overseas Chinese who are widely scattered abroad. They hope to attract these overseas Chinese business persons to invest in their homeland by offering suitable investment and production environment.

Finally, the geographical restriction on the Chinese zones appears not to be so rigorously imposed as is the case with other zones. The Chinese government is apparently willing, if a convincing case of need is put forward, to extend the same privileges to investors wishing to establish facilities adjacent to but outside the boundaries of the zones.

III-4. Basic data of China's special economic zones

In August 1980, the Fifteenth Session of the Standing Committee of the Fifth People's Congress approved to set up Special Economic Zone in some areas within Guangdong Province. These areas are in the cities of Shenzhen, Zhuhai and Shantou, and the name 'Special Economic Zone' was conformed for the first time. Two months later, in October 1980 establishment of the fourth SEZ within Xiamen in Fujian Province was approved. Hainan was set up in 1988 (See Figure I).

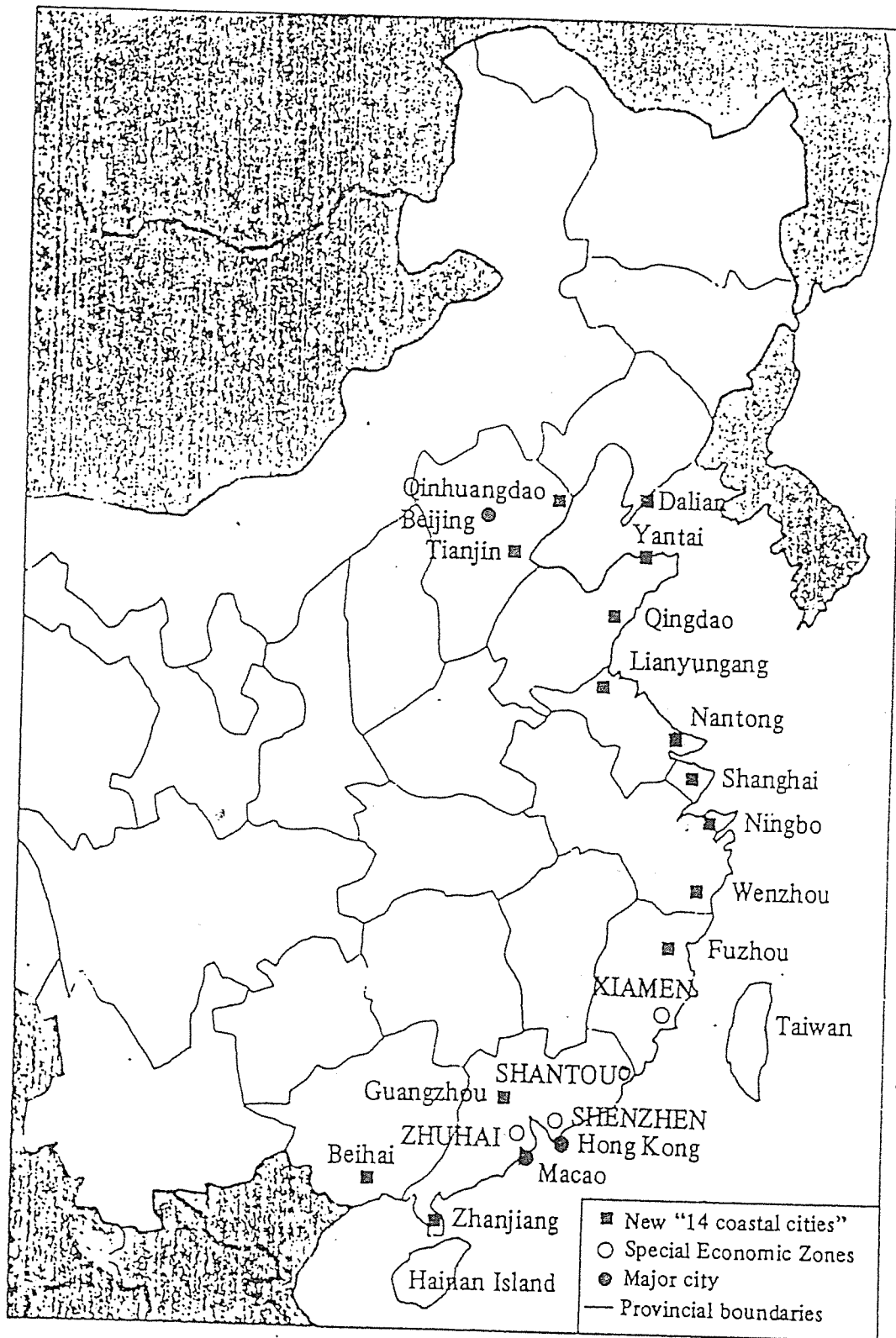
Table III-1 Basic data of five special economic zones

Name	Shenzhen	Shantou	Zhuhai	Xiamen	Hainan
Approval time	1980	1980	1980	1980	1988
Original size (sq.km.)	327.5	52.6	6.81	2.5	34,000
Current Size (sq. km.)	327.5	234.0	121.0	131.0	34,000
Original population (1980,million)	0.084	n.a.	n.a.	n.a.	6.275
Current population (1994,million)	3.355	1.030	1.015	1.200	7.114

Source: People's Republic of China yearbook in 1989/1990, 1992, 1995.

Shenzhen SEZ occupies an area of 327.5 square kilometers. Shenzhen is located in Baoan county of southern Guangdong Province. It is bounded on the south of the New Territories of Hongkong, which make it an ideal location for Hongkong investment. Shenzhen SEZ is intended to be a multipurpose zone where integrated regional development will take place, which includes industry, commerce, tourism, real estate,

Figure I. China's Special Economic Zone



Source: ESCAP, 1985: 115.

and other activities. Industrial development receives the main emphasis in the programs.

Shantou SEZ originally covered an area of 52.6 square kilometers, and later in 1991 was expanded to current size 234.0 square kilometers. It mainly focuses on the establishment of manufacturing industries for export. The city of Shantou was an area of high emigration toward the America and southeast Asia during the 19th century. Shantou was chosen as a SEZ because of its good port facilities, its extensive network of overseas Chinese and the traditional trade and commerce activities of the city.

Zhuhai SEZ is bounded to Macao, initially comprised an area of 6.81 square kilometers, and in 1988 was extended to current size 121.0 square kilometers. It also concentrates on an integrated development, which includes to set up industry, commerce, tourism, public service and other activities. Emphasis is placed on the establishment of manufacturing production and tourism sector.

Xiamen, unlike the three other SEZs, is located in the Province of Fujian. It was established in October 1980 through the usual channels of central government and provincial government approval and covered 2.5 square kilometers at first. In April 1984 the territory of the Xiamen SEZ was expanded to 131 square kilometers. Xiamen is moving toward the development of a large tourist base and light industrial export. Due to its location opposite to Taiwan, Xiamen might benefit substantially from investment from Taiwan.

The fifth SEZ, Hainan island, was part of Guangdong Province when it was set up in April 1988. Its status was raised to that of province at the same time. The whole of Hainan island was established as a SEZ but given the size of the island, 34,000 square kilometers, the provincial government has followed a policy of establishing zones within the zone, some similar to an industrial estate, and others on a specialized basis such as the tourist development area at Sanya, the free trade area at Yangpu, and the other zones for manufacturing industry.

III-5. The achievement of China's special economic zones.

Over the time of the opening-up process, China's special economic zones have developed to the big cities, with population 3.4 million of Shenzhen, 1.0 million of Shantou, 1.0 million of Zhuhai, 1.2 million of Xiamen, and 7.1 million of Hainan respectively by end of 1994 (See Table III-1). SEZs have attracted lots of investment from domestic and overseas. As table III-2 shows that the total investment of SEZs in

Table III-2. Investment employed by the end of 1994 in five SEZs (US\$ billion)

	Shenzhen	Shantou	Zhuhai	Xiamen	Hainan	Total SEZ
Total investment						
in Capital construction	2.77	1.15	1.11	1.15	2.47	8.65
Foreign funds	1.73	0.77	0.76	1.87	1.23	6.36
Foreign funds as % of Total investment	62	67	54	163*	50	74

* Actual inflows of foreign capital exceeded total investment in Xiamen by the end of 1994.

Source: Modified from Wall, David. "China's Opening Door", The Royal Institute of International Affairs.

capital construction is US\$ 8.65 billion, foreign funds employed is US\$ 6.36 billion, foreign funds accounts for 74 per cent of total capital construction. The investment in infrastructure mainly comes from domestic sources, and foreign investment mainly concentrates on the manufacturing and other service sectors. Hong Kong is the leading sources of investment, accounts for two-thirds of the total investment. Investment from Taiwan is the second largest source of overseas investment (Brekke, 1991).

**Table III-3. Sector allocation of foreign investment approvals
Shenzhen, in 1991(US\$m)**

		%
Primary sector	8.9	0.77
Manufacturing	778.0	67.53
Construction	38.4	3.33
Communication	16.7	1.45
Trade and catering	57.4	4.98
Housing and public service	172.0	14.93
Others	80.7	7.10
Total	1152.1	100.00

Source: Shenzhen's yearbook in 1992.

Although the investment in SEZs largely concentrated on the real estate sector in the early development stage, the main investment has shifted to manufacturing sector now. For example, Table III-4 has shown in Shenzhen that the manufacturing accounts for 67.53 per cent of total foreign investment in 1991. It mainly focuses on labor-intensive export-oriented manufacturing, including electronics, textiles, food, toys and other light industry(Chen, 1993). Real estate has changed to receive the second largest proportion of the total investment, account for 14.93 per cent of total investment.

Although the majority of production has come from labor-intensive industries, in recent years, some more capital-intensive and technology-intensive industries, including the manufacturing of computer parts, are beginning to be located in the SEZ's region (Olivia, 1995).

Table III-4. Export from five SEZs (US\$ billion)

	Shenzhen	Zhuhai	Shantou	Xiamen	Hainan	China	SEZs as % China
1991	3.45	0.53	0.82	1.15	0.67	62.1	10.66
1994	18.32	1.49	2.20	3.39	0.99	121.04	21.80

Source: China's yearbook in 1992, 1995.

Exports have grown rapidly among SEZs. Table III-4 shows that the SEZs' share of total export in China is 10.66 per cent in 1991 and 21.8 per cent in 1994. Shenzhen's foreign trade has reached US\$18.32 billion in 1994, which accounts for 15 % of all of China's export. Shenzhen' export has exceeded Shanghai, and become the first export city of China in 1994. Almost all of the export in Shenzhen goes through Hong Kong. (China's yearbook 1995).

The SEZs' gross product increases very rapidly. For example, in the past decade, Shenzhen's gross domestic product increased at an average annual rate of 47 percent GDP per capita increased, the highest rate among all cities in mainland China. (Brekke, 1991). The total domestic production in 1994 has reached to US\$ 7689 million, which accounts for 1.46 per cent of total domestic production in China. Shenzhen is no

longer a low-wage center. Just as Hong Kong business people in the 1980s invaded Shenzhen, so Hong Kong and Shenzhen are going to have to attract the hinterland together (Economist, 1995).

With the help of foreign capital, Shenzhen has also developed its financial industry. There are now 24 foreign financial institutions with agencies in the city, including 15 branches of overseas banks from Japan, the United States, Canada, France, Singapore, and Hong Kong (Brekke, 1991).

Moreover, most parts of the government revenue from the SEZ are spent on the transfer payments to those in the relative poor areas in China other than on the benefits of the residents in the SEZ (Yao & Whitwell, 1992).

III-6. The impact of China's special economic zones on economic development

Two types of analysis must be undertaken when considering the impact of Special Economic Zones on China's economic development. The first is related to development of SEZs themselves and their achievement, which has been done above. The second, perhaps the more important, is an analysis of the benefits that accrued to the China through the intangible demonstration effect, and the transfer of management, advanced technology and development experiments. The following analysis hopefully achieves this second goal.

Special Economic Zones as the function of windows and bridges in China's opening-up process. As mentioned before, due to the cautiously policy-maker, almost each reform

in China went through an experimental phase within some particularly geographic areas, like Special Economic Zones. The special economic zones as windows and bridges have played a main role on China's open door policy, regional development and the integration of the Chinese economy into the world economy.

After the establishment of the four Special Economic Zones, the fear of the unknown about open door policy was overcome and the benefits of foreign investment recognized in the early stage of opening-up process. In 1984, fourteen coastal cities were opened up, which based on the experience of running the SEZs (See figure I). They form a circular area along the eastern coast of the country from south to north. Over the next few years the Yangtze and Pearl river deltas and the Liaoning and Shangdong peninsulas and Hainan island were also opened up. In 1988 Hainan was created a province in its own right and established as the fifth Special Economic Zone. The process of opening up has continued, city after city and province after province were opened up to foreign investment and trade. In 1990 the growing political and economic significance of Shanghai was recognized when the State Council designated East Shanghai, the large area between the Huangpu River and Yangtze rivers, as the Pudong Special Development Area. It was given all the policy privileges of the Special Economic Zones, and was allowed to encourage foreign investor into the trade and financial sectors. In 1992 the whole Yangtze river basin was opened, as well as some inland areas such as Tibet. Many border areas were also opened in 1992, allowing trade and investment with Russia and other states, Korea, Vietnam and other countries.

More than one decade have passed since economic reform and market-opening policies were initiated, with the resulting development of coastal regions, now the major cities of China's inland are beginning to adopt their own approaches to opening-up process and regional development. There are very few areas in China not open to foreigners for trade and investment today.

It is important that the SEZs, the opened coastal areas, coastal cities, development zones have brought competition to the domestic national markets. It also brought about competition between domestic markets and international markets and the products from opened areas gradually entered into the world. International investors have had more choice when dealing with the broad coastal open areas of China to make great efforts to enhance its attraction and competitiveness. This means that China has set up more competitive and more marketing economy within its region than before. The effect of the opening-up process has been stunning. The trade to income ratio has jumped from around 5% in 1978 to around 25% today (China's yearbook, 1995). China is already a formidable force in international trade, an export powerhouse that ranks 11th in the world (Mcgeary, 1997).

One of the other lesson to be learned from the experience of the development of Special Economic Zones is the recognition for China's opening-up policy. China has benefited greatly from the clear signals sent by its opening-up policy. Once the reform process began, there was rarely any doubt about its direction. Despite occasional reversals, provincial and city governments, and enterprises, both state and non-state, were convinced that the country was headed toward an export-oriented development

and market-oriented economy. In efficiency terms, according to the some authors' analysis in chapter 2, it will be highly distorted between SEZs and inland areas while different policies are placed in different areas, like different treatment to foreign investment, and discriminatory exchange retention rights. China has committed to give an undoubtable signal that the government has determined to change the economy's orientation from import substitution to export promotion, and finally integrates national economy into the world economy. Considering the long-term development for the whole country, this policy will finally benefit to China's economy.

Special Economic Zones as a demonstration to the national development. While China's open door policy began with the establishment of such special economic zones in the South. Another kind of special zone that is named for Economic and Technological Development Zones has been established in fourteen open coastal cities after 1984, and later in other main cities within country. These ETDZs have taken full advantage of SEZ's experiences, and have accelerated China's open market policy. However, ETDZs differ from SEZs in several important respects (Yoshitomi, 1996). First, while an SEZ is the proposed site of an eventually developed city, an ETDZ is an industrial area situated within a coastal city, not an independent urban area. Secondly, sites for SEZs are chosen in underdeveloped areas, with historically weak industrial and low technological bases. In contrast, sites for ETDZs are selected in historically developed areas, already equipped with certain level of industrial, technological and economic base. Thirdly, an SEZ provides favorable corporate income tax treatment not only for manufacturing, but also for commerce and services. An ETDZ favors only manufacturing operations affiliated with foreign companies.

For example, the Beijing Experimental Zone for Development of New Technology Industries approved in 1988, includes leading Chinese research and academic institutions such as Beijing University, Quinghua University and the Chinese Academy of Sciences. A notable feature of this zone is that once either a foreign or a domestic company located there is officially recognized as a high-tech enterprise, it will receive favorable tax treatment equivalent to that accorded an SEZ. One of the Qualifications for such recognition is that at least 30 per cent of the employees should be university graduates. Over two thousand such enterprises have already been established in the zone, attracting the participation of professors and researchers from leading universities and research organizations. Industrial activities in the zone are clearly based on China's own best and brightest scientists and engineers. Its future potential for technological development looks very bright. China's new strategy is to move in the direction of developing industries more explicitly through the accumulation of knowledge in science and technology, and thus to go beyond the ASEAN countries' industrialization policy of encouraging exports and inviting foreign investment (Yoshitomi, 1996). This is possible because China would see to have an advantage over the ASEAN countries and Hong Kong in terms of the historical accumulation of both human and physical capital.

Special economic zones have been established as a means of introducing advanced technology and management know-how, development experiments are conducted in collaboration with foreign companies, and with the help of foreign technologies. The Chinese Government hopes that Chinese firms will benefit from the technological knowledge of foreign firms entering the zone. However, success in attracting high

technology has been somewhat less than expected. Many low technologies, low value-added industries such as toy assembly did invest in the SEZs taking advantage of low cost labor. Most of firms are involved in labor-intensive production. In particular, women make up 50 per cent of the migrate labor force in Shenzhen and working on the simply productive line. In addition, some firms that do have unique technological advantages protect this knowledge carefully.

However, some technology transfer took place within the context of joint ventures or co-production, in which foreign investor provides funds, equipment and technology and the Chinese partners provide use of the land, factory building and labor force. It is obvious that there are some transfers of technology and management experience between their cooperation. The transfer of technology would include proprietary processes and know-how through training Chinese employees in the foreign countries or on-site. In the long-term, these kinds of companies will intend to help Chinese to source raw materials and machinery locally as well as purchase Chinese raw materials for the foreign countries' operation if the quality and price are competitive.

Managerial techniques and methods of product quality control are inevitably transferred to the local middle-level managers employed. When these managers move to employment elsewhere in China, the training they have received confers a benefit on the domestic economy(Chen, 1993). For example, Xu Licun returned to his rural hometown in Anhui Province after 3 years in Shenzhen and immediately set off a storm of controversy. A state-owned cold storage plant in Guanting township had just declared bankruptcy, and, using the skills he had learned as a salesperson, Xu

convinced the local government to sell it to him cheaply. Within a few months, the prime roadside site and buildings were transformed into Zhongdaotian Feed Co., the largest private animal feed factory in the province. Guanting is a typical example of how winning back the locals can pay off. Around 400 of its migrant workers have returned home, and 6 enterprises have been founded in Guanting town (Gilley, 1996).

This policy has brought the Chinese economy into line with the international division of labor by exposing it to international market competition. In particular, the Shenzhen zone has been a focal point of foreign direct investment, especially in the assembly activities of electrical and electronic components. In the past decade, the majority of production has come from labor-intensive industries such as textiles and clothing, toy manufacturing and electronics but, in recent years, some more capital- and technology-intensive industries, including the manufacture of computer parts, are beginning to be located in the region (Olivia, 1995). For examples, the presence of Japan companies and sophisticated products is Sanyo Electric Co. for radio cassette record and semiconductor assembly, Hiachi Ltd. For TV picture tube assembly, and Epson for printers (Yoshitomi, 1996).

Due to Shenzhen border with Hong Kong, with every new reform experiment in Shenzhen, such as the establishment of a stock exchange and the institution of property sales, the local government moves a step closer to Hong Kong's way of doing business. Aided by abundant advice and information from Hong Kong professionals, the Shenzhen authorities are publishing more data on property and stock trading while experimenting with regulatory mechanisms. Despite these radical changes, there are

still many officials in the SEZ who are uneasy over the speed and scope of the reforms. Indeed, at the enterprise level reforms have so far barely touched management cadres. In Shenzhen, as elsewhere in China, the managers of large state enterprises may still enjoy the same status and privileges as top bureaucrats (Cheng, 1992). This may gradually change, however, as increasing numbers of officials from Shenzhen and Guangdong visit Hongkong to take part in management training courses. Chinese officials make frequent visit to look at Hongkong's administrative system. They are said to show particular interest in how the colonial authorities see to control the local property market, the stock exchange and the housing and building sectors.

The other important indicator of benefit for SEZs is structural reforms of the enterprise system, which have experimented within the SEZs and imported into the rest of the national economy. The way of SEZs to be more cooperation with international business and entering international market than before. For example, Hong Kong employs some three million workers in China, and Chinese investment in Hong Kong now exceeds Hong Kong's annual investment in China. Hong Kong has long been China's main trading partners, as reexport trade has fueled prosperity on both sides of the frontier (Segal, 1994).

Moreover, recently development shows that Vtech, a Hong Kong personal computer and mobil-telephone company, has 150 engineers among the 10,000 employees at its Dongguan factory in the Shenzhen special economic zone. The company is expanding its use of Chinese brainpower in an effort to gain a competitive edge. Programmers in China can do the job at one quarter to one third the cost of their counterparts in North

America (Clifford, 1993). It means that the level of labor force within SEZs has gradually risen to higher technological level, and further gone to higher production.

Special Economic Zones as a base to set up and test the legal system, management system, market factors for China into the international economy.

The role of SEZs in legal system. At the early stage of development, the main task of the SEZs was to enact and promulgate economic laws and regulations in order to concentrate efforts on a series of reforms of the economic system. The reforms were to be carried out by means of market regulation suitable for current international markets in order to establish a good investment environment. Over the reform process, the SEZ is already at the forefront of Chinese legal development in economic matters. However, the officials in Shenzhen argue that the SEZ needs a legal system independent of political policy to facilitate its development into a trade and financial center along the lines of neighboring Hong Kong. Professor Tong Likun, head of the law department at Shenzhen University, further noted in a recent article in the Shenzhen SEZ Daily that the continuation of Hong Kong's independent legal system after it reverts to Chinese Sovereignty in 1997 would make it difficult for the two areas to cooperate on the equal basis if the SEZ has no legislative powers(Cheng, 1992). Legal system is far away from effective in China today, and the problem has to be solved gradually.

The role of SEZs in the reform of management system. The four mainland SEZs are governed by their own local government. Hainan was established as a province, being separated from Guangdong soon after its establishment as an SEZ, in 1988. In principal the governments of the zones have a great deal of delegated power.

However, the operation of that power is subject in many ways to influence and control from the central government and the provincial governments. Dependence on the central government for transfers limits the independence of any authority. For instance, Hainan has been trying to reduce the size of its government, using the slogan 'small government, large society'. It cut the number of government departments to about one-third of the number of departments and bureau in the central government. However, central government departments and bureau that did not have direct counterparts in Hainan began to make difficulties, including refusing to pass on grants on the grounds that without specialized offices there was no way of ensuring that the grants would be used for the purposes for which they were given. As a result, the structure of the government of Hainan has been returned to something approaching its former composition. It means that the severely tested in the case of SEZ governments has supposed the further reform in management system. China has to change its principal of a strong central government working with local governments and peoples' congresses to modify central policies to suit local conditions, and give more liberalization to the local government.

The role in market-oriented economy. Commodity prices in the SEZs are mostly determined by the market. The development of commodity markets is not unique to the SEZs, but it has gone further there than in the hinterland. The significance of the reform represented by the introduction of the joint-stock system and of stock markets and exchange is limited. Western-style accounting and auditing practices and disclosure rules are probably the most significant reform element that has been introduced. These reforms will restrict the number of firms willing to seek listing or

which could qualify for listing. Apart from the limited accountancy requirements for listed companies, the reforms have not so far made any significant changes to the Chinese economic system under which state enterprises operate.

The role in labor market reform. The reforms of the employment systems in China have been a crucial element in the wider process of labor reforms that are attempting to introduce some measures of market forces into the country's state system. Employment system in China before 1979 was the centrally-administered allocation system, the permanent employment system was the primary employment system. Once a person was employed, job tenure was automatically acquired and portion would be based strictly on seniority. Workers in this category also enjoyed generous fringe benefits including old-age pensions, housing, subsidies on education, medical and labor insurance, and childcare facilities.

It is not difficult to understand that the social background of the Chinese workers their ideology, and their work habits often lead to misunderstandings and strained relations with their foreign managers. Ideological differences between socialist China and the West are the root cause of many of the difficulties faced by foreign investors. Results indicate that, while production costs are much, owe in Shenzhen, problems can arise in dealing effectively with the local Chinese authorities. General work attitudes in socialist China also make it difficult to select and retain workers (Chan, 1988). The major objective of the labor reform has been to improve labor productivity by gradually introducing some mechanisms of a free labor market similar to that in

Western capitalistic societies. The special economic zones have served as the testing grounds.

The main reforms introduced into the zones have been the extensive replacement of lifelong tenure with short-term contracts. The ability of firms to recruit some categories of workers on a national basis and to dismiss unsatisfactory workers. Many of the management and industrial techniques widely accepted in the West will not be easily accepted in China. Foreign employers have urged the Chinese authorities to be more flexible with this policy and to treat a cadre like any other employee of the foreign enterprise (Chan, 1989).

In 1980, the contract employment system was introduced at test sites in selected foreign-funded enterprises. After two years of initial trials, the new system was gradually introduced into some state-owned and collectively-owned enterprises, as well as certain government institutions. The zone has been acting as a testing ground for labor reforms. Despite the gradual shift from a mandatory to a more regulatory role, labor administration continued to represent the major part of the work of the Shenzhen Labor Bureau. It appears there is a trend of decentralizing power from the state and its agencies into the hands of the employers and the job seekers. In such a context, one would expect that concomitant adjustments would take place at the micro level, that is, at the work place. There are some signs that China has permitted a higher degree of individual choice of employment as it moves towards a more open economy (Olivia, 1995).

As analysed above, China's SEZs have played an initial stimulation and important role in China's economic development. According to Chen's cost-benefit analysis in 1993 shows that although considerable public expenditure was incurred in establishing the zone in an isolated agricultural area, the benefits, such as employment, tax revenue, foreign-exchange earning and technical training, which the zone has brought to China, have exceeded the costs. The Shenzhen SEZ is beneficial public investment from the standpoint of China's economic welfare. The Shenzhen SEZ in China has been more successful than Bataan but slightly less successful than Masan because of the latter's lower infrastructure costs. The government's objectives of using the SEZs as the laboratories for testing and expanding open door policy have been fulfilled. The zone is profitable both in the commercial sense, from the viewpoint of foreign investors, and in the social sense, from the national economic viewpoint. After over one decade of operation, the SEZs have been considered an outstanding investment and has achieved many of the purposes for which it was instigated. The Chinese Government has extended the some successful policies practiced in the zone to other parts of China. The development and practice of the SEZs have proved that the basic national policy of opening up to the outside world is absolutely correct.

In short, the SEZs have played a key role in China's economic development and opening-up process, and have worked on China to foster new attitudes towards development and raise its level of reform. Some problems have appeared in the further development and have to be solved. Next Chapter will closely analyze the problems faced China's SEZs today, and decide what further roles they could play in future.

Chapter IV

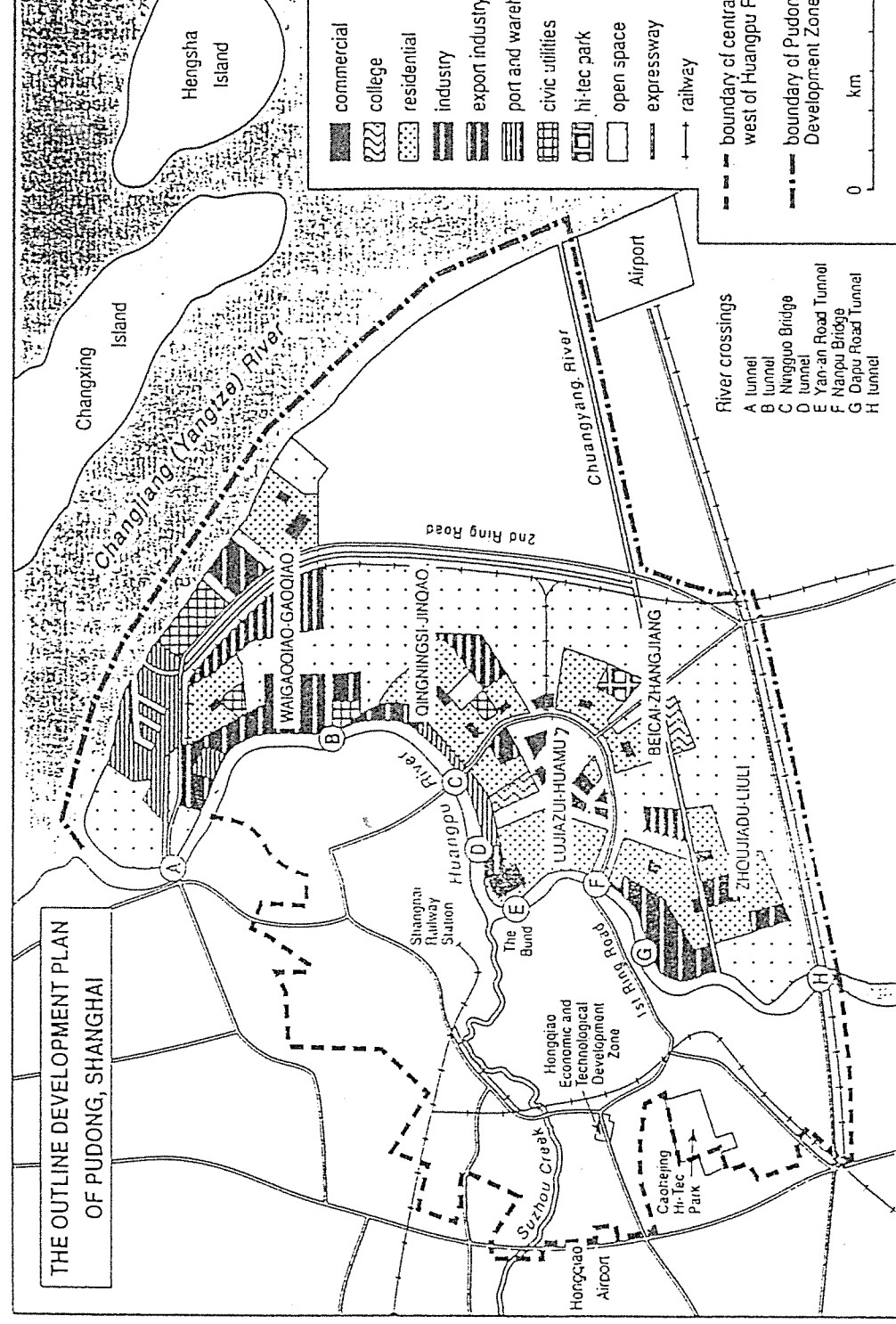
The future role of SEZs in China's economic development

A case study of Pudong New Area

VI-1. The Background of the establishment of Pudong New Area

Shanghai is the largest city in China, with an area of 6340.5 square kilometers (including Pudong New Area) and a population of over thirteen million people. Because of its size, its location on China's east coast, and its important role in China's history, Shanghai has become the center of industry, commerce and transportation in China. Before 1949, Shanghai attracted the majority of foreign investors and merchants who transacted business in China. These foreign companies went to Shanghai, established business and employed local people. For this reason, workers in Shanghai have historically had more contact with foreigners than those in other regions of China, and the people of Shanghai, in general, have been more receptive to the outside world. Today, Shanghai has a strong industrial base with a work force of several million. This includes an abundance of specialists in science, technology and management. There are five million workers in the manufacturing sectors. There are one million professionals and 1,327 research institutes here. One-third of the country's colleges and universities are in Shanghai, and the city is also a magnet for talent from the rest of China. In addition, it possesses huge commercial and consumer markets, and products from Shanghai have a reputation for quality throughout the rest of China.

Figure II. The Outline Development Plan of Pudong, Shanghai



Source: Binns, 1991:364.

Shanghai is divided by the Huangpu River into eastern and western districts of approximately equal size (see figure II). When people speak of Shanghai, they are usually referring to the western district-Puxi, a modern metropolis that accommodates most of the population. In contrast, the eastern district, Pudong, has remained largely undeveloped, with a population of only 1.34 million people, which accounts for one-twelfth of total Shanghai population in 1990 in spite of its close proximity to the ocean relative to Puxi.

Shanghai is the China's largest industrial city with a well-trained work force and a large pool of scientists and technicians and extensive overseas connection. While Beijing in the 1980s cautiously nurtured its opening up to the West and mainly focused on coastal economic zones in the South, Shanghai was relatively neglected. Deng in the end of 1970s did not insist on Shanghai being made into a special zone. In 1992 Deng candidly expressed his regret: "in retrospect, one of my biggest mistakes was leaving out Shanghai when we launched the four special economic zones. If Shanghai had been included, the situation with regard to reform and opening in the Yangtze Delta, the entire Yangtze River valley and, indeed, the whole country would be quite different" (Zhang, 1996). Pudong is Deng Xiaoping's personal reparation to Shanghai for his great mistake of not making the city a special economic zone in the beginning of the 1980s. Deng hoped that Pudong together with Puxi is to be China's business and financial center. Shanghai's new stock exchange will be in Pudong. The further market-oriented reform and foreign exchange market will take experience in Pudong, together with other SEZs. This experience will be different from that in the southeast China because of its location in China's economic center. While the establishment of

the SEZs in southeast China was considered not to influence the whole country economy if they had failed, the reform experience in Shanghai will affect the whole economy.

In addition, since late 1990, China began to recover from the political repercussions of the Tiananmen Crisis and return to the pre-1989 conventions on reform and opening to the outside world. The “spring Wind” speeches of Deng Xiaoping early in 1992 focused national and international attention on China’s five special economic zones. After the events of 4 June 1989 critics, the SEZs had become more vocal, describing the ones as bastions of capitalism. Deng’s intervention was a direct response to this criticism and was aimed at maintaining and increasing the pace of opening up and economic reform in China by drawing attention to what he saw as the remarkable success story of the country’s SEZs. He regarded them as models for the rest of China to emulate. This position was taken up generally and the continuing importance of their role was stressed later.

Clearly the development and opening-up of Pudong will not only have an influence on Shanghai’s development, but is an important symbol of the further reform and opening-up of China. On April 18, 1990, the Chinese State Council declared that it would open Pudong to foreign investment and promised to apply many of the policies previously available only in the five SEZs. The Pudong project represents a further reform within the center of China’s economy.

Moreover, although SEZs in the south of China have achieved great success to attract investment, most of investment mainly focuses on the small or medium-size enterprises, and lose out in the race to attract high-technology manufacturing investment because of their lack of support facilities, such as industrial base, skilled workers, professionals. Most foreign multinationals have preferred to locate projects in China's established industrial centers, such as Shanghai, Wuhan, Changchun and Tianjin in the North, which offer better access than SEZs to skilled workers, engineers and support industries (Cheng, 1992). This is probably one of important factors to stimulate to further open inland cities of national economy center to the outside world and set up Pudong New Area, which has a strong industrial and technological support from Shanghai than the areas in Southeast China.

IV-2. The development aims of Pudong New Area

Situated at the mouth of the Yangtze River, Shanghai is the gateway to China's rich belt of central provinces. Pudong project is launched on a large scale and shows the central government's determination to catch up with the pace of world economic development. The project has attracted much attention from overseas investors. Compared with other development zones in China, Pudong has different targets. Essentially its aim is to boost the economy of the Yangtze River Valley and build Shanghai into an international economic, financial and trading center. The Pudong plan is not to simple turn it into an export processing area or free trade zone but a dynamic, new, modern economic urban area. It should have all the facilities of an up-to-date economic city. The Pudong project aims to open up the interior provinces to more

foreign trade and investment and provide them with an advanced service center that is a window of the world for China.

Pudong is to be an experimental base for new government policies, like the establishment of modern financial system (Parry, 1996). Pudong New Area, like the five SEZs, enjoys the same policy that permits the establishment of foreign banks within its territory. Foreign capital banks or financial institutions were not a well-known concept to the Chinese people ten years ago during the early years of economic reform. Foreign capital banks were not permitted to be set up in the SEZs until 1985. While there are as yet no private banks in China, it appears that the existing regulations will probably form the basis for regulation of private banks when and if they are established in the future. Foreign banks are being tempted there when China's currency renminbi (RMB) becomes convertible. In addition, joint venture foreign trade companies will be allowed to set up shop on Pudong, which will give more experience of further market-oriented economy.

Pudong is to be developed into a modern regional industrial base, heavily oriented towards foreign business. The development of industry focused on microelectronics, telecommunication facilities and chemicals, particularly on modern biomedicine science and bio-medicine production. The high rate of returns on investment is attributed to the investment environment. Shanghai, as China's economic center, can provide plenty of talent, technology and information services for the Pudong area.

As a comprehensive development zone, Pudong will also promote a modern agricultural system. Rather than merely increasing output value, it intends to adopt modern techniques in agricultural science. These can then be introduced into other area of Shanghai and in the Yangtze River Valley. This is a new plan that has yet to attract reasonable foreign investment.

Pudong is being developed in three stages. The first, which ended in 1995, focused on basic infrastructure, such as roads, power, and water supply, as well as two bridges and two tunnels between Pudong and Puxi. The Second, from 1996 to 2000, will see the completion of more sophisticate infrastructure, including a subway connecting Pudong and Puxi, housing, more office space and the first stage of Shanghai's second international airport, expected to handle 20 million passengers and eight million tones of cargo a year by 2000. The final stage will focus on professional services sector development and human resources development.

In general, Shanghai government has adopted several principles to guide the development of business in Pudong. Basically, these principles mandate that businesses in Pudong must be beneficial to China, and Shanghai in particular; Absorb capital and investment; expand international trade, and particular in international labor division and competition; acquire foreign advanced technology and help the development of export industries; further the supplementation, coordination and integration of industries between Pudong and Puxi; contribute to Shanghai's development into a multi-functional economic, trading and financial center.

IV-3. The performance of Pudong New Area

Basic data and function zones

Table IV-1. Basic data of Pudong New Area

	Area (sq.km)	Functions and features
Lijiazui Financial and Trading Zone	28	The center of business: Commence and trade, office, finance, information and real estate.
Jinqiao Export Processing Zone	8.9	Industry park: Similar to the other EPZs
Waigaoqiao Free Trade Zone	10	Bounded free trade: Similar to the FTZ in the world
Zhangjiang High-Technology park	17	High-technology development: Scientific and technological industry, scientific research education

Source: Shanghai Economy Year Book, 1995, Shanghai: shanghai Economy Yearbook Editorial and Publishing Agency.

Pudong covers an area of 522.75 square km. Pudong's aim is to develop four districts specializing in different activities (see table IV-1). The Lujiazui Finance and Trade Zone comprises of 28 square kilometers. With its advantageous location, it will, together with the Bund at the west bank of Huangpu River, become the Center Business and financial District of Shanghai. Its functions mainly include commerce and trade, office, finance, information and real estate. After four years of development and construction, there is a profound change in the functions and investment environment. The blueprint for the area includes over 140 new buildings, up to the end of 1994, 29

percent of which have been completed. There are total 77 enterprises to invest in the area, including 22 foreign-fund enterprises and 55 domestic companies. Two of the biggest property developments on Pudong now involve a US\$ 2 billion commercial and residential complex in a joint venture between the Lujiazui authorities and Thailand's Chia Tai group, and a US\$ 100 million shopping complex between the Shanghai No. 1 department Store and the Yaohan group of Japan (Cheng, 1992).

The main target in the area is trade companies and financial institutions. The head offices of all the major state banks, including the People's Bank of China, have already relocated there and the Shanghai Stock Exchange will join them next year. Overseas financial institutions are also being strongly encouraged to move to Lujiazui. Up to the end of 1994, the press named 10 foreign banks with branches in Shanghai that have applied for licenses to open branches in Pudong, including the Hong Kong and Shanghai Banking Corporation, Standard Chartered Bank, Citibank, Sanwa Bank, and the Bank of East Asia.

Pudong's industrial zone has been successful in attracting foreign investment despite competition from other cities and neighboring provinces. The 8.9 square km Jinqiao Export Processing Zone has covered 215 projects, in which 153 projects have started to build, 81 projects have started operation, the total investment introduced is US\$ million 3260. An industrial park has initially taken shape with communication, automobile and other means of transportation, new household electrical appliances, food processing, computer equipment and pharmaceutical and biological products. Up to the end of 1994, world famous multinationals that made investment in the area

reached 30, more than half of the total number of multinationals that came to Pudong. These multinationals set up 36 projects, which include Hitachi, Sharp, Ricoh, Fujita, OMRON from Japan; Ford, Crown, Johnson, Molex, Hughes, IBM, Rosemount, Allied Signal from USA; Siemens, FESTO, Leica from Germany; GPT from UK; Christian, Rhone-Poulens from France; Alcatel Bell from Belgium; Schindler from Switzerland; Philip from Holland; Golden Star from South Korea; AS Watson from Hongkong.

Waigaoqiao Free Trade Zone covers 10 square kilometers, the biggest free trade zone in mainland China. As a bonded area for companies that cannot trade in China, the zone can be used to store goods until needed. For domestic companies focused on the East China market, the zone's Bonded Commodity Exchange is valuable. Up to the end of 1994, the total number of projects approved to operate in the zone amounted to 1380, with a total amount of investment of US\$2.51 billion. The proportion of enterprises with foreign investment is high, there are 909 projects with investment amounted to US\$1.77 billion, which accounts for 65.8 per cent and 70.3 per cent respectively. Most of the projects are engaged in international trade.

The Zhangjiang hi-tech Park is regarded as a new and high technology development zone, occupies 17 square kilometers. It is divided into four functional districts: scientific and technological industry district, scientific research and education district, high-grade commercial and residential district and dwelling district. The park takes biological and medical engineering, microelectronics and communication technology, computer equipment as the three priority fields of development. It has been less

successful than Jinqiao Export Processing Zone in attracting foreign investment. So far, 30 projects have set up there, 17 of which are foreign-funded. The Pudong New Area Administration wants to see the area develop into a center for pharmaceutical manufacturing, noting that Shanghai has excellent human resources in the medical field. There are a few joint-ventures enterprises to set up in the area such as Shanghai Roche Pharmaceutical Limited, a Sino-Swiss joint venture; Shanghai Nycomed Pharmaceutical Limited Company, a Sino-Norwegian joint venture. Zhangjiang is not doing as well as Jinqiao, but compared to anywhere else in the world, Zhangjiang is a success's story.

Investment

Table IV-2. Investment in agreement (US\$ million)

Year	1990	1991	1992	1993	1994	Total
Total investment in capital Construction	174.1	348.8	903.6	1988.0	3132.5	6547.0
Foreign funds investment	34.4	100.9	1352.8*	1756.7	2592.7	5889.5
Foreign funds as % of total investment	20	29	150	88	83	90

* Actual inflows of foreign capital exceeded total investment in 1992.

Source: Pudong New Area Year Book, 1995, China's Statistical Publishing Agency.

As table IV-2 shows that the total investment in Pudong's capital construction has reached US\$ 6547.0 million, in which US\$ 5887.5 million comes from foreign investment, which accounts for 90 per cent of total capital construction. The

investment in infrastructure comes from different sources. The main sources of finance for the big infrastructure projects have mainly come from Chinese government and also from the World Bank, Asian Development Bank and Japanese government loans (Schoenberger, 1996). Other sources include the revenue raised from the conversion of state-run factories to private concerns via the Shanghai Security Exchange, and domestic investment in Pudong by the Ministry of Aeronautics and the Ministry of Textiles. Overseas investment in Pudong has been predominantly in manufacturing sector, with companies attracted to Shanghai by its strong manufacturing base and superior human resources, and to Pudong in particular by the area's investment incentives and long-term potential. It is necessary to point out that Chinese state enterprises and collective enterprises are also dominant form of investment to set up business in Pudong.

Table IV-3. The source of foreign investment by agreement(US\$million)

Countries	Hongkong	USA	Japan	Taiwan	Canada	UK	Singapore	Holland
1994	1824.1	158.2	136.5	56.5	136.2	73.6	77.3	23.4
Accumulation 1990-1994	3854.0	489.5	399.9	212.8	169.2	138.6	125.3	121.3
%	65.4	8.3	6.8	3.6	2.9	2.4	2.1	2.1
No.of contracts	1325	340	269	288	135	37	87	9
Funds of each contract	2.9	1.4	1.5	0.7	1.3	3.7	1.4	13.3

Source: Pudong New Area Year Book, 1995, China's Statistical Publishing Agency.

By the end of 1994, a total of US\$ 5,889.5 million foreign investment is brought by 2,663 foreign-funded enterprises registered in Pudong. Table IV-3 shows that the

value of investment from Hong Kong accounted for 65.4 percent of the total investment. Firms from some countries and areas invest in China via intermediary firms in Hongkong probably because of unfamiliar with the situation of investment environment. The second and third important investors are USA and Japan which account for 8.3 and 6.8 per cent of total investment respectively.

As table IV-4 shows that over US\$ 10 million accounts for 68.1 per cent of total foreign investment, which means that most of foreign investment belongs to large scale investment in Pudong. The average investment of the leading eight countries exceeds US\$ 1 million.

Table IV-4 Scale allocation of foreign I nvestment approvals (US\$ million)

	1990	1991	1992	1993	1994	As % of total
Over 10.00	20.00	47.19	925.71	1104.79	1911.12	68.1
5.00-10.00		8.10	82.08	135.73	141.76	6.3
3.00-5.00		8.47	69.69	131.58	64.88	5.2
1.00-3.00	8.35	23.72	131.10	229.26	195.48	10.3
0.5-1.00	2.90	7.90	65.28	107.44	135.31	5.4
0.3-0.5	0.79	3.86	40.68	29.37	36.93	1.9
Under 0.3	0.84	1.68	38.21	18.50	45.92	1.8

Source: Pudong New Area Year Book, 1995, China's Statistical Publishing Agency.

Table IV-5 shows that the main destination of foreign investment is the sector of housing, public facilities, which accounts for 43.4 per cent of total foreign investment, the situation is similar to that in Shenzhen in the early stage of economic development.

The manufacturing sector occupies 30.9 per cent of total foreign investment. According to Shanghai Economy Yearbook, the new and high technology enterprises account for 68 per cent of the total number of enterprises in Pudong and investment in New and high technology projects accounts for 78 per cent of the total investment in industrial projects.

Table IV-5. Sector allocation of foreign investment approvals (US\$million)

Year	1990	1991	1992	1993	1994	Total	%
Manufacturing	34.4	77.1	605.6	533.0	516.1	1818.3	30.9
Construction		0.2	13.5	24.6	37.3	75.5	1.3
transportation		7.9	30.9	33.8	171.7	244.3	4.1
Housing, public facilities		7.8	588.6	654.5	1304.7	2555.7	43.4
others		7.9	114.0	510.8	501.7	1134.4	19.3

Source: Pudong New Area Year Book, 1995, China's Statistical Publishing Agency.

As known before that Shanghai has long been China's economic and technological center, the aim of development in Pudong New Area is making Shanghai to be a new and high stage in industrial sector. For example, a development in the local chemical industry. Although little petrochemical expansion is planned, the local industry, organized under Sinopec and the Shanghai Chemical Industry Bureau, has actively built foreign collaboration and has succeeded in attracting several of the world's leading chemical producers in a range of joint ventures. Shanghai Chlor-Alkali concentrated on using imported technology for economic expansions. The company also adopted Western accounting practices. It is also adopting a Western approach to management to get international standards of productivity. It is the first among the

Shanghai chemical producers to insist employees sign a labor contract directly with the company rather than the government, and it will adjust salary levels based on whole performance (Wood, 1994).

Table IV-6. Foreign investment in agreement by type of enterprise (US\$million)

Year	1990	1991	1992	1993	1994	Total	%
Joint ventures	28.9	91.6	728.4	1308.5	1413.7	3623.1	61.5
Cooperation ventures	0.9	32.8	82.3	153.4	410.4	650.2	11.1
wholly foreign-owned	4.7	6.0	276.7	277.5	731.6	1296.5	22.0
B stock companies			265.3	17.3	37.0	319.7	5.4

Source: Pudong New Area Year Book, 1995, China's Statistical Publishing Agency.

Table IV-6 shows that joint ventures are the main type of enterprise of foreign investment, which accounts for 61.5 per cent of total type of enterprises. The wholly foreign-funded enterprises have become a significant factor in the opening up process. In the early stage of open door policy, there were few such enterprises because of the caution on the part of foreign investors and due to an unwillingness on the Chinese side to accept them. They now account for a significant share, 22 per cent, of total investment. With foreign direct investment there is a close association between domestic and foreign participants especially if the arrangement involves a joint venture or licensing. It is no doubtable that these will bring the new western technologies to China for country's development.

There is another further reform to the market-oriented reform that has set up two stock markets in Shanghai and Shenzhen. The B share companies have accounted for 5.4 per cent of total foreign investment in Pudong as table IV-6 shows.

Production

Table IV-7 show that the results of the investment. Gross output in Pudong has increased rapidly. The growth rate remains high, and the gross output has been increasing faster than the national average, around 10 per cent. The growth of GDP in Pudong has reached average 23.3 per cent from 1990 to 1994.

Table IV-7. Output in Pudong New Area (US\$million)

Year	1990	1991	1992	1993	1994	Average of Growth
GDP	725.8	861.9	1222.8	1975.9	3508.4	23.3 %

Source: Pudong New Area Year Book, 1995, China's Statistical Publishing Agency.

Export and import

The export in 1993 is 1202.0 US\$ million and in 1994 is 2320.6 US\$ million. The total export in China in 1994 is 121,000 US\$million. The export accounts for 1.9 per cent of China's total export in 1994. As table IV-8 shows, Japan is the most important destination for the exports of Pudong. This is very different from the former five Special Economic Zones whose most destinations are Hongkong. USA and Hongkong

are the second and third destination in Pudong's export. The main export goods are the light industrial products such as textile raw material and products, which accounts for 42 per cent, and then are machine, electrical equipment and spare parts, which accounts for 11.8 per cent.

Table IV-8. The destination of exports from Pudong New Area (US\$m)

Countries	Japan	USA	Hongkong	South Korea	Australia	Germany	Singapore	Netherlands
1994	568.5	343.4	327.9	87.2	83.6	71.6	70.0	56.1
%	24.5	14.8	14.1	3.8	3.6	3.1	3.0	2.4

Source: Pudong New Area Year Book, 1995, China's Statistical Publishing Agency.

The import of Pudong New Area is US\$ 1390.0 million in 1993 and 2414.1 in 1994. Table IV-9 shows that Japan still is the most destination of import goods, which accounts for US\$ 585.9 million, 24.3 per cent of total value of import. Follow by the USA, France and Germany, Which account for 15.4 per cent, 15.0 per cent and 6.8 per cent of total value of import. The main import products are machine and electrical equipment, which accounts for 36.6 per cent, and transportation facilities, which account for 22.1 per cent. The balance of payments between 1993 and 1994 showed a little deficit in terms of export and import.

Table IV-9. The destination of imports to Pudong New Area (US\$m)

Countries	Japan	USA	France	Germany	Hongkong	Taiwan	South Korea	Belgium
1994	585.9	371.1	362.9	165.3	138.5	116.1	104.5	74.7
%	24.3	15.4	15.0	6.8	5.7	4.8	4.3	3.1

Source: Pudong New Area Year Book, 1995, China's Statistical Publishing Agency.

Employment

Table IV-10. Employment in Pudong (10,000)

Year	1990	1991	1992	1993	1994
Total Population	133.94	137.34	140.67	143.73	146.20
Labor force	39.61	41.19	53.84	78.88	76.71
of which					
Agriculture	0.24	2.31	2.36	1.47	1.75
Manufacturing	25.77	26.54	34.05	40.97	38.44
Tertiary	13.60	12.34	17.43	36.44	36.52

Source: Pudong New Area Year Book, 1995, China's Statistical Publishing Agency.

The contribution of Pudong New Area to the overall employment situation in China is minimal because of the limited area. The average of growth from 1990 to 1994 is 19.62 per cent. Manufacturing and tertiary sectors account for 50.11 per cent and 47.61 per cent of total labor force in Pudong. The main sectors of employment increasing are construction and manufacturing. For example, there are 20,000 employment in construction in 1990, but 80,000 in 1993; the increasing employment in electronic and communication manufacturing is from 4,000 in 1990 to 19,000 in 1993; the growth of medical manufacturing is from 1,000 in 1990 to 17,500 in 1993 (Yao, 1995: 48).

In general, it has brought significant development to Pudong New Area itself in terms of attracting investment and increasing the production. There is little contribution to the whole country's economy like SEZs in their first stage of development. Pudong's

development has to experience a transformation from attracting investors simply through such preferential policies as tax and deduction and profit concession into an overall development of market functions. It means that Pudong itself has to solve its problems existing in development, the experiments will be gotten from the solution of the problems, and will finally benefit to the whole country's economy.

IV-4. The problems in Pudong's development

The lack of human resource to facility the international business

The main problem that remains of great concern for foreign investors is the lack of well-trained professional management staff and skilled workers. All new and ambitious projects facing difficulties, and Pudong suffered come from insufficient experience and the lack of the right kind of human resources to keep up with the demand of rapidly growing economy. Many foreign investors complain that China lacks of understanding and expertise on the part of officials who are familiar with international business and market and also lack resources to respond to market economics. Although experimental management personnel can be recruited locally, most of them have not received formal training in modern management techniques. The application of outdated management methods to a modern enterprise has been a hindrance to economic development. It is not easy to get these professionals to Shanghai in a short time and China has to take years to get its education process up to date.

The problem of financial system

Pudong faces the backward state of the local financial system (Jun, 1992). Banking reform has been slow, financial regulations lack transparency and full currency convertibility is a long way off. The Potentially greatest obstruction to foreign investment in Pudong, and probably anywhere else in China, is China's foreign exchange control policy that prohibits Chinese yuan from being freely convertible into foreign currency. The Chinese government is currently tackling this problem. For example, China's first national interbank currency market opened in Shanghai replacing the fragmented system of currency swap centers. With China's multiple rates having been unified at the start of 1994, the new foreign exchange center represents another step towards linking regional exchanges and the eventual aim of full convertibility of the yuan. But no clear solution appears likely in the near future. China probably gives the Hongkong dollar's direct linkage to the US dollar and has no urgent need for the yuan to become fully convertible.

China is also short of skilled staff and technology to set up financial service and system (Timewell, 1994). The necessary financial technology linking all parts of the country is not yet in place, developing a genuinely effective currency market may take more time.

Although foreign banks are allowed to establish in Pudong and other SEZs, they can not operate in local currency. As the result, foreign banks remain limited in their activities. To be really effective the foreign banks need to operate in local currency and take local deposits. The Beijing authorities will protect their own institutions and

cautiously try to control the pace of change. Although Chinese authorities are eager to have foreign banks, they do not want the locals to be swamped. New rules will be introduced for foreign banks, set out conditions for participation in local currency business. More liberalization and more change are necessary in this area, but can not happen immediately.

Pudong as a financial window on the world is slow in coming. Although the Shanghai headquarters for all the major state-owned banks are in Pudong, the head offices are still in Beijing. This function must be surrendered to Shanghai if it is to become a genuine financial center for China. Hong Kong Bank's Victor Sun said one problem is that Shanghai, unlike Hong Kong, cannot be considered in its own right. When Hong Kong became a financial center, it was the right place at the right time. The same could be true of Shanghai, but politically Shanghai can not be considered independent of Beijing (Parry. 1996).

It is obvious that the improvements of China's overall investment policy have become more urgent in the 1990s. Although Shanghai has long harbored the dream of return to its former glory as a financial hub, the backward financial system Pudong faces means that development of the 522.75 square kilometer site will take much longer. It is not difficult to get a settlement system but it takes a long time to get the rules, regulations and the people necessary such as accountants and lawyers. Furthermore, it is also up against stiff competition from Tokyo, Hong Kong and Singapore, none of which existed as financial centers in the 1930s. and 1940s.

Legal system.

China lacks an adequate legal code. There are numerous gaps and silences within the various regulations applicable to Pudong. Investors would doubtless welcome clearer policies. The development of the regulations and enforcement mechanism which are suitable to the international market and business has only just begun. The Chinese law of mortgage and security, for example, is still in its infancy, with only a few provinces and cities such as Guangdong, Fujian and Shanghai having formal mortgage laws. The legal and regulatory framework of markets in the West has developed over hundreds of years, the legal system in China just begins to be set up and has a long way to go.

Market-oriented economy.

The significance of the market reform represented by the introduction of the joint-stock system and of stock markets, but exchange is limited. After a hesitant start, Chinese authorities have moved swiftly to incorporate a securities market within the new market approach to economic development. The authorities sanctioned 2 stock markets in Shanghai and Shenzhen. Initially, they expanded fitfully, but now appear to have survived the formative stage. The secondary market has displayed excessive volatility, and this can be partly ascribed to structural deficiencies that in the long term can be corrected.

As the analysis in chapter III, apart from the limited accountancy requirements for listed companies, the reforms have not so far made any significant change to the

Chinese central controlled Characteristics of the system under which state enterprises operate.

Short-term problem.

Although excellent progress has already been made on improving infrastructure with US\$ 1.69 billion invested up to the end of 1994 (Business China, 1993), it is still a big problem facing Pudong today, including: power shortfalls, an inadequate telephone system, ill-developed feeder roads, and delays in moving goods across the Huangpu, and etc.

Approval of procedure of government.

Although it is needed to make policy and approval of procedure quickly, some investors still feel Shanghai moves more slowly than the southern provinces, such as Guangdong. Shanghai is one of the economic center, and has been developed highly center-control economy. Its officials habitually operate well within the parameters ascribed by the state. It is the persisting problem of bureaucracy that threatens to undermine the works of Pudong New Area because of delays in government departments. Pudong will likely be the simplified government approval process (Cheng, 1992). However, it appears that Pudong's simplified procedures only apply to approvals required by the Shanghai local government, not to those by the State Council, which is the body that has sole authority to examine and approve larger amounts of investment in Pudong.

Distortion between Puxi and Pudong, SEZs and the rest of economy

Pudong, like the five SEZs, benefits from preferential policies adopted by the central government that are not available in the rest of China. The success in SEZs did not come naturally, and will not do so in Pudong either (Sang, 1993). It will come only as a result of special government policies. Most foreign investors seem to come the SEZs and will probably go to Pudong rather than other parts of China, largely because of the special policies applicable in these areas. Enterprises remaining in Puxi, west of the Huangpu River, are concerned about funds being lavished on Pudong, and they may have to bear an increased tax burden. Some city officials worry that Pudong, with its preferential policies, could eventually threaten Puxi's economic superiority (Cheng, 1992). Moreover, some enterprises in Puxi have decided to move to Pudong to take its advantage. To a certain extent, success in Pudong and SEZs will maybe possible at the expense of other parts of China that are not entitled to any preferential policies.

Similarly, the special policies may also lead to the development of a form of unfair competition within China. Products and technology from the foreign capital enterprises in the SEZs are almost certain to be superior to those produced elsewhere in China, due to the greater availability of investment funds and increased know-how. The preferential policies encourage foreign capital and advanced technology to flow mainly to the special areas. Accordingly, the foreign capital enterprises and technology of the SEZs may easily overpower their state-owned competition in the market place.

Moreover, there is a more difference between east, middle and west regions because of unequal investment from central government. China has announced a US\$ 21 billion investment plans to develop the Yangtze River before the year 2000. The region that has a population and area greater than Japan, stretches from Shanghai's coastal Pudong area, to Chongking on the Shichuang province. Altogether, 28 cities and 8 prefectures in the Yangtze basin have been designated open, meaning they are on the priority list for foreign investment. It also means the government will accelerate the development of transportation, power, telecommunications and other infrastructure. Guangdong province will receive infrastructure investments of US\$ 19 billion in the next two decades. Investment in the Northwest will be increased by US\$ 0.16 billion. Investment in Southwest is received US\$ 0.20 billion.

IV-5. The future role of SEZs in China's economic development: some suggestions

As the analysis above, opening-up process and developing market-oriented economy have taken place in China today. International capital has inflow into China. Foreign direct investment (FDI) expanded yearly since 1978, accelerated a bit after 1984 and again after 1990, which accounts for 20 per cent of FDI to low developing countries in the world today (Arndt, 1996). FDI needs to be maintained in order to facilitate movements towards development objectives in China. In order to attract foreign financial capital and to hold it firmly in place, the overall improvement of development policy and further reform have to happen in China to face the large scale investment and the challenge of invaded international economy. There must be further progress with some institutional changes. As analysis in former chapter, the reforms have not so

far made any significant change to the Chinese central controlled characteristics of the system under which state enterprises operate, private enterprises accounts for only 13.5 per cent of the economy (Mcgeary, 1997). Since market-oriented economy is still in infancy, Pudong and other SEZs are a useful point of reference from which to address certain issues that are important to the continued success of modern China's economic reform. The following are some suggestions for the future role of Pudong and SEZs in China's development.

First, one of the main problems with the development of market economy in China is the lack of a cohort of Chinese citizens with knowledge of how markets operate and being familiar with international business. Since the market economy in SEZs has developed further than the rest of China, people get more chance to contact with foreign investors. The importance is to make such trainers gain experience in dealing with the foreign investors, particularly on management contact arrangements within foreign companies or joint ventures. Much more attention needs to be paid to the training of market operators in colleges and university established in the Pudong and SEZs.

China faces more serious lack of skilled staff in financial service. Klein in 1995 suggest that China should make fully use of the advantage of Hong Kong financial center. Send young Chinese technicians to Hong Kong financial houses, and begin from basic job to high position training, so that they learn by doing. In addition, many high skilled staff can be created through higher educational training in banking for the financial institutions in future. It is necessary to set up business schools in universities, as

separate faculties, in order to keep up the demand of executives and technicians for the growing financial sector of Chinese economy. Book learning will certainly make a large added contribution to the successful buildup of the financial sector, but on-the-job training should not be given up. Book learning and learning in the field are both desirable and mutual methods to help to establish the China's modern financial sector.

Second, in addition to the macroeconomic policies- opening up policy and oriented-market economy-that have already been put in place, the key to continued long-term, stable growth in China depends on having a strong financial system in place. A sound banking system is critical as a first step toward liquid and healthy financial markets in a market-based economy (Forrestal, 1995). The banking system must be revised and made efficient in the modern sense. Banking and financial markets, in general, need telecommunications systems for modern operational functions. Pudong, as a financial window for China, has to set up a well-established banking and financial system with a complete set of banking ordinances and provide a much better investment environment for investors. Improvements depend on the changes in the general financial banking infrastructure to provide support for the primary market, and finally operate efficiently under the control of high-educated, high-skilled staff and managers.

Third, stock markets need to be set up on a world-class scale, other markets for a range of commodity trading and financial instruments besides equities need to be established. So far, these reforms restrict the number of firms willing to seek listing or which could qualify for listing. In order to set up modern economic management system, Pudong and the SEZs have to experiment to develop regulations setting out

criteria for listing on the exchanges. It is necessary to set up enforcement company law and an independent judicial system.

The large number of domestic investors will need to be made more aware of the true nature of equities and the market itself. Markets have displayed considerable speculative tendencies in two stock markets, but international accounting standards must be further adopted in order to make objective judgments on share values (Thomas, 1993). In addition, companies and shareholders should be able to appoint directors, directors should be able to appoint and dismiss managers, and takeovers through share purchase, subject to takeover codes, should be introduced (Wall, 1993).

Fourth, in particular, there is a lack of awareness of the importance of regulations in China's development. Since foreign investors always welcome the clear policies and regulations in their investment, a legal framework and regulation of market operation are needed in order to avoid confusion and financial damage to newcomers in such economic activity. Many experiments will need to be introduced, including the establishment of practice codes and laws for various markets, and an independent judiciary. The laws will also need to be set up to protect consumers' and workers' rights. Enterprises are required to be subjected to audit and to make full and public disclosure of their accounts and the interest of their directors.

Fifth, although the development of infrastructure in SEZs or Pudong New Area has reached higher level compared with inland China, the problems they faced are still a big constrain for attracting more investment and development. A flexible and modern

infrastructure such as transportation, water supply, sewage system is needed, using many modern modes. It is necessary to encourage foreign firms to invest in infrastructure. Moreover, the problem of bureaucracy has to be solved, the simplified government departments and the decentralization will have to take place in future.

Finally, the undertaking of economic reform with different policies applicable to different parts of China has enlarged the gaps in attitudes and living standards that exist among the Chinese people. To a certain extent, distortion between SEZs and the rest of economy, particularly in inland China has happened. This does not mean that the special policies are undesirable, or that the outcome of the economic reform process will necessarily be harmful and unpleasant. To the country, most people in China support such policies and few people want to see the process of reform stopped. The opening-up policy has brought some chance to people who want to do something and are able to do something, and made use of human resource more effectively than before. However, the problems, which result from unfair policies to different part of China, will have to be resolved.

The SEZs mainly attracted labor-intensive small and media-enterprises, and could not attract high-technology manufacturing investment before because of short of support system as analysis in the former chapter. Most foreign multinationals have preferred to locate projects in China's established industrial centers. It means that the special policies are not the main factor to attract serious investors, the main factor to attract high-technology manufacturing is the investment environment and support system.

Government in China has to remove as many as possible of the special policies that have been used in SEZs particularly. In fact, until most people and parts of China catch up, for example, equally enjoy the same special policies, economic reform can not be deemed successful. The reasoning here is that the whole undertaking of economic reform should benefit the entire nation, not just certain well-placed areas. To speed up and carry through the economic reform, the special policies should sooner or later applied across the board to the rest of China. This process can not happen over night or in short time, since Chinese people are not familiar to the operation of international business and the codes that have been developed by western countries over few centuries. Actually, Chinese people in SEZs have lost some profit during dealing with international business people, but the benefit from that is the experience of doing business and learn-how just at expense of SEZs' experience rather than at the cost of the whole country. At last, China has to apply the special policies to the whole country and make a healthy economic development.

In short, the role of SEZs and Pudong in China's development is not same as the beginning of the opening-up process and economic reform. The SEZs and Pudong today has to experience a transformation from attracting investors simply through such preferential policies as tax and deduction and profit concession into an overall development of market functions.

Chapter V

Conclusion

The open door policy initiated in the late 1970s marked the beginning of economic reform in the People's Republic of China. Leading these reforms was the establishment of five special economic zones. These special economic zones serve as 'window' to opening-up process. So far, each of the five SEZs has been successful in achieving this goal. They have taken on a leading role in the process of economic reform and in the further development of open door policy. In fact, many observers attribute much of the success of China's economic reform and its economic development to the achievements of the SEZs (Sang, 1993).

The Special Economic Zones have not only played an important role in China's opening up and economic reform process, but also they have been important bridges over which foreign capital, technology, goods, managers and ideas have crossed into the hinterland and over which the products of the hinterland have gained access to world markets. They have been important economic laboratories in which some of the features of Western capitalism could be tried out and when found appropriate to Chinese conditions, allowed to cross the bridge into the hinterland. Some of the remarkable growth in China's income and trade since 1979 can be attributed to the lessons learned from looking through the window and from the results of the experiments carried out in the SEZs.

Although there is no huge transfer of technology into SEZs, which is similar to the analysis of the other authors in Chapter two, the new Western technologies have

brought to China for the country's development. For example, main type of enterprise of foreign investment is joint ventures between domestic and foreign participants, and there is a close relationship between them. Moreover, it is easy to understand that the employment in SEZs has no significant contribution to China's total employment because of their limited sizes. In addition, SEZs can provide important training for a work-force not previously accustomed to industrial work.

Furthermore, they can also have indirect and long-term effect on growth and development. When market-oriented economic reforms in the SEZs turns out to be successful and they could influence the rest of China's economy. Over time, as development proceeds, the zones can not remain static enclaves but must change and gradually become a more integrated part of the host economy. As some people have said, Hongkong business people invade Shenzhen ten years ago, at present, Shenzhen and Hongkong people will together invade the inland market (Jun, 1996).

Not only is integration of the SEZs into the rest of the economy important in attaining long-term growth objectives, but also upgrading and diversification. Simple assembly of imported inputs is only a first step when it comes to building industrial capability and competence. More complex products have taken place within the zones. Backward linkages have further evolved in SEZs.

According to the literature review about role of EPZs in host countries in chapter two, most authors thought that SEZs generally decrease welfare or have only a limited welfare-raising effect (McIntyre, 1996). Johansson in 1994 argued that conventional

studies have focused on the piecemeal reduction of distortions in one sector of the economy and several potentially important explanatory variables may have been more or less overlooked in the mainstream theoretical and empirical literature. These important variables maybe are the change of ideology and human capital development over the process of opening-up and economic development in China.

Before the end of late 1970s, China's economy was characterized by a high centre-government control and state-owned enterprises. There was no space for market economy to develop in terms of management system and productive system. The SEZs, as chosen by reformers as a special and small areas, have played an important role in the introduction of market-oriented economic principles. The process of opening-up has brought economic liberalization and effective utilization of human resource in China. To some extent, the change of ideology and human capital development are more important than technology and capital themselves because effective utilization of physical resources depends on the human resources. The long-term political and social cost of SEZs is much more important than the short-term balance-of-payments concerns (Basile & Germidis, 1984).

It can, therefore, be concluded that the SEZs were established to give China a base for importing new management skills, embodied technologies and learning the capitalist ways (ESCAP, 1985). They were laboratories where reforms could be tried and once adjusted to Chinese realities, imported into the rest of the country.

There is still a fear of political resistance to the introduction of market practices into China. Pudong New Area was set up in 1990 under this situation. It marks the next step of economic reform process in China. In the hinterland of China still features a centrally controlled economic management system, and experiments with market mechanisms are still at a very early stage. Pudong and SEZs must continue to play the role of economic laboratories. They are a valuable element in the overall development strategy of the country. They allow a 'space' in which the full market mechanism can be set up and later spread through the rest of the country.

Bibliography

- Arndt, C. & Hertel, T. (1996). *Implications of China's Growth for the Rest of the World*. Seminar in agriculture building of Massey University.
- Balasubramanyam, V.N. (1988). *Export Processing zones in Developing Countries: Theory and Empirical evidence*. in David Greenaway, ed. Economic Development and International Trade. London: Macmillan Education Ltd.
- Basile Antoine & Germidis, Dimitri, (1984), *Investing in Free Export Processing Zones*. Paris: OECD.
- Beijing Review. (1996). *Pudong Attracts Foreign Investments*. June:10-16.
- Binns, Tony. (1991). *Shanghai's Pudong Development Project*. Geography. Vol.76, Part 4.
- Brekke, W.A. (1991). *Hong Kong: A window on China*. Business America. Vol. 112, No. 23: 6-7, the 18th November.
- Bucknall, K.B. (1989). *China & The Open Door Policy*. Sydney, Wellington, London, Boston: Allen & Unwin.
- Chai Lai-xin. (1995). *Shanghai: Chuang Jian Xing De Guo Ji Jing Ji Zhong Xin Chen Shi*. Shanghai: Shanghai People's Publishing House(in Chinese).
- Chan, J.C.M., Li, N.Y. & Sculli, D. (1989). *Labor Relations and the Foreign Investor in the Shenzhen Special Economic Zone of China*. Journal of General Management. Vol. 14, No. 4. Summer.
- Chan, J.C.M., Sculli, D. & Wong, S.K. (1988). *Costs of Production in the Shenzhen Special Economic Zone of China*. Engineering Costs & Production Economics. Vol. 14 (3): 199-209.
- Chan, T.M.H. & Kwok, Y.W. (1991). *Economic Development in the Shenzhen Special Economic Zone: Appendage to Hong Kong?* Southeast Asian Journal of Social Science, Vol. 19 No. 1&2.
- Chen, J.H. (1993). *Social Cost-Benefit Analysis of China's Shenzhen Special Economic Zone*. Development Policy Review. Vol. 11: 261-271.
- Cheng, E., Mosher, S. & Kaye, Lincoln. (1992). *China: Deng's Distant Vision; Free for All; The Sweat Shops Nearby; Hubs and Spokes; A Very Special Zone*. Far Eastern Economic Review. Vol. 155, No. 19: 23-32, 14th, May.

- Clifford, M. (1990). *South Korea: Good-bye to All That*. Far Eastern Economic Review. 150 (50): 64. 1990 Dec. 13.
- Clifford, M. (1993). *Companies: Brains for Hire*. Far Eastern Economic Review. Vol: 156, No. 38: 76-77, 23rd, September.
- Crovita, L.G. (1992). *Year in Review: '92- For Asia, It Was for Richer, for Freer*. Far Eastern Economic Review. Vol. 155, No. 51,52: 28-34, 24th-31st, December.
- Goderez, Car, *A World Bank Staff Working Paper on Export Processing Zone*, pp. 7-8, 1981.
- Economist. (1995). *China: Cheap no More*. Vol. 336, No. 7921: 27-28, 1st, July.
- ESCAP (Economic and Social Commission for Asia and the Pacific) of United Nations, (1985). *An Evaluation of Export Processing Zones in Selected Asian Countries*. Bangkok, ESCAP/UNCTC Publication Series B, No 8.
- Forrestal, R.P. (1995). *China's Financial Markets*. Journal of Asian Economics. Vol. 6, No. 2: 267-274.
- Gilley, Bruce. (1996). *Sisters act*. Far Eastern Economic Review. Vol. 159, No.14: 20, April.
- Gilley, Bruce. (1996). *Provincial Prodigals*. Far Eastern Economic Review. Vol. 159, No. 14: 22-24, April.
- Glasse, J. (1990). *Foreign Business in China Responds to Political Instability*. Multinational Business. Vol. 1: 9-16, Spring.
- Historical Institute of Shanghai Government. (1994). *Deng Xiao-ping and Shanghai's Reform and Opening-up*. Shanghai: Shanghai People's Publishing House (in Chinese).
- Holstein, W.J. (1994). *His Dream: Revamp Shanghai*. Business Week. Vol. 340:68.
- Hughes,H. (1995). *Why Have East Asian Countries Led Economic Development?* The Economic Record, Vol. 71, No. 212, March 1995, pp. 88-104.
- Institutional Investor. (1996). *Pudong New Area Administration: Full Steam Ahead*. Vol. 30, No. 9: 4-5, September.
- James, W.E., Naya, S. & Meier, G.M. (1989). *Asian Development: Economic Success and Policy Lessons*. Madison, Wisconsin: The University of Wisconsin Press.
- Johansson, H. (1994). *The Economics of Export Processing Zones Revisited*. Development Policy Review. Vol. 12, pp. 387-402.

- Jun, Fukui. (1992). *Shanghai's 50-year Plan to Create a "Second Hong Kong"*. Tokyo Business Today. Vol. 60, No.12: 56-57, December.
- Kim Jin-moon, (1991). *Masan-Changwon Economy*. Business Korea, 8 (12): 45-49, 1991 Jun.
- Klein, L.R. (1995). *A Stage of Economic Reform: The Time for Financial Modernization*. Journal of Asian Economics. Vol. 6, No. 2:261-265.
- Kleinberg, R. (1990). *China's "Opening" to the Outside World-The Experiment with Foreign Capitalism*. Boulder, San Francisco & Oxford: Westview Press.
- Lammie, D. (1993). *Pudong Development Zone*. Contemporary Revises. Vol. 262, No. 1527.
- Li Ning. (1995). *Pudong-Full of Hope*. Beijing Review. May, pp. 8-14.
- Liang, W.S. (1988). *The Theory and Practice of China's Open Policy*. in Brogan, Brian, (ed.). Xiamen Special Economic Zone. National Center for Development Studies, The Australian National University.
- Lucas, R.E. (1993). *Making a Miracle*. Econometrica, 61 (2), March, pp. 251-272.
- Matthew, Montagu-pollock. (1994). *Shanghai's Amazing Property Boom*. Asiamoney. Vol. 5, No. 8: 22-25.
- Mcgeary, J. (1997). *The Next China*. Times. 3rd March:23.
- McIntyre, J.R., Narula, R. & Trevino, L.J. (1996). *The Role of Export Processing Zones For Host Countries and Multinationals: A Mutually Beneficial Relationship?* The International Trade Journal, Vol.X, No.4, Winter 1996.
- Miyagiwa, K.F. (1986). *A Reconsideration of the Welfare Economics of a Free Trade Zone*. Journal of International Economics. Vol. 21: 337-350.
- Nachmias, C.F. & Nachmias, D. (1996). *Research Methods in the Social Sciences*. New York: St. Martin's Press.
- Nyaw, Mee-Kau. (1990). *The significance and Managerial Roles Of Trade Unions in Joint Ventures with China*. International Studies of Management & Organization. Vol.20 1,2): 109-123.
- Olivia, K.M.Ip. (1995). *Changing Employment Systems in China: Some Evidence From the Shenzhen Special Economic Zone*. Work, Employment & Society. Vol. 9, No. 2: 269-285.

- Osborne, M. (1986). *China's Special Economic Zones*. Paris: Development Center Studies of OECD.
- Page, J.M. (1994). *The East Asian Miracle: An Introduction*. World Development. Vol. 22, No. 4, pp. 615-625.
- Panagariya, A. (1995). *What Can We Learn From China's Export Strategy?* Finance & Development. June.
- Papadopoulos, Nicolas, (1985). *The free trade zone as a strategic element in international business*. International Trade, Vol. 12:1, 51-55. Spring.
- Parry, J.E. (1996). *Shanghai's Pudong New Area: A modern New City Arises*. Institutional Investors. Vol. 30, No. 9: 1-3.
- Perkins, D.H. (1996). *China's Future: Economic and Social Development Scenarios for the Twenty-first Century*, in OECD. Ed. *China in the 21st Century: Long-term Global Implications*. Paris: Head of Publication Service.
- Perkins, F., Zheng, Y.X., & Cao, Y. (1993). *The Impact of Economic Reform on Productivity Growth in Chinese Industry*. Asian Economic Journal, Vol. 7, No. 2.
- Pudong Academy of Development. (1995). *Report on Development of Pudong: 1991-1994*. Shanghai: Shanghai People's Publishing House.
- Rabbani, F.A. (1983). (Ed.). *Economic and Social Impacts of Export Processing Zones in Asia*. Tokyo: Asian Productivity Organization.
- Rolf, Alter, (1991). *Lessons from the export processing zone in Mauritius*. Finance & Development. 28 (4): 7-9, December.
- Romero, A.T. (1993). *Export Processing Zones: Insights From a Recent ILO Survey*. Labor Education, No.91, 1993/2.
- Rondinelli, D.A. (1987). *Export Processing Zones and Economic Development in Asia: A Review and Reassessment of a Means of Promoting Growth and Jobs*. American Journal of Economics and Sociology, Vol. 46, No. 1 January, 1987.
- Sang, Bin-xue. (1993). *Shanghai's Pudong New Area*. Northwestern Journal of International Law & Business. Vol. 14, No. 130.
- Schoenberger, K. (1996). *China's Boomtown is a Bust for Investors*. Fortune. Vol. 134, No. 2: 90-92, July.
- Segal, G. (1994). *China's Changing Shape*. Foreign Affairs, Vol.73, No.3, June.

- Thomas, W.A. (1993). *Emerging Securities Markets: The Case of China*.
Journal of Asian Business. Vol. 9, No. 4: 90-109.
- Timewell, S. (1994). *Shanghai's Renaissance*. The Banker. Vol. 144, No. 819.34.38.
- Vittal, N. (1977). (Ed.). *Export Processing Zones in Asia: Some Dimensions*. Tokyo:
Asian Productivity Organization.
- Wall, D. (1976). *Export processing Zones*. Journal of World Trade law. Vol., 10,
pp. 478-489.
- Wall, D. (1988). *The Nature, Rationale and role of export processing zones with
special reference to China*, in Brogan, Brian, (ed.). Xiamen Special Economic
Zone. National Center for Development Studies, The Australian
National University.
- Wall, D. (1993). *China's Economic Reform and Opening-Up Process: The Role of the
Special Economic Zones*. Development Policy Review. Vol. 11: 243-260.
- Walsh, A.C. (1995). *Getting on Top of Your Thesis*. Fiji: Amokura Publications.
- Warr, P. (1984). *Korea's Masan Free Export Zone: Benefits and Costs*. The
Developing Economies. Vol., 22, Number 2, pp 169-184.
- Warr, P. (1987). *Malaysia Industrial Enclaves: Benefits and Costs*. The Developing
Economies. xxv-1, March, 1987, pp.30-55.
- Warr, P. (1989). *Export Processing Zones and Trade Policy*. Financial &
Development. June, 1989, pp.34-36.
- Warr, P. (1990). *Export Processing Zones*. in Chris Milner, ed. Export Promotion
Strategies: Theory and Evidence From Developing Countries. New York, London:
Harvester Wheatsheaf.
- Warr, P. (1993). *The Potential for Export Processing Zones: Lessons from East Asia*.
Pacific Economic Bulletin. Vol.8 (1), Jun 01 1993, pp. 19-26.
- Wong, K.Y. & Chu, D.K.Y. (1985). *Modernization in China: The Case of the
Shenzhen Special Economic Zone*. Oxford, New York, Hong Kong: Oxford
University Press.
- Wood, A. (1994). *Shanghai: Surprise Number of Ventures*. Chemical Week.
Vol. 154, No. 11: 40-43, March.
- World Bank, (1994). *The East Asian Miracle: Economic Growth and Public Policy*.
New York: Oxford University Press.

- Yao, S.T. & Whitwell, J. (1992). *A Growth Model For the Chinese Special Economic Zone*. Wellington: Center for Asia Pacific Law and Business, Victoria University of Wellington.
- Yoshitomi, Masaru. (1996). *The comparative Advantage of China's Manufacturing in the Twenty-first Century*. in OECD, (ed.). China in the 21st Century: Long-term Global Implications. Paris: Head of Publications Service.
- Yao, Xi-tang. (1995). *Chuang Zhao Hui Huang*. Shanghai: The publishing House of Shanghai Social Science (in Chinese).
- Zhang Zhong-li. (1995). *Pudong Kai Fa Yu Mai Xiang Xing Shi Ji De Zhong Guo Jing Ji*. Shanghai: The Publishing House of Shanghai's Social Science (in Chinese).
- Zhang Zhong-li & Zhang Dao-geng. (1995). *Pudong Development and the Establishment of Shanghai's Position as the Center of Trade*. Journal of Asian Economics. Vol. 6, No. 2: 279-289.
- Zhang, W.W. (1996). *Ideology and Economic Reform Under Deng Xiaoping 1978-1993*. London & New York: Kegan Paul International.
- Zhao Qu-zhen. (1995). *Pudong's Development With a World Project*. Journal of Asian Economics. Vol. 6, No. 2: 275-278.