

**A STUDY ON THE DEVELOPMENT PLAN OF INCHEON
FREE ECONOMIC ZONE, KOREA: BASED ON A
COMPARISON TO A FREE ECONOMIC ZONE IN
PUDONG, CHINA**

By

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ABSTRACT

“A Study on the Development Plan of Incheon Free Economic Zone, Korea: Based on a Comparison to a Free Economic Zone in Pudong, China”

This study aims to draw lessons from experiences with the development of a free economic zone in Pudong, China, and based on those lessons, to provide implications for the development of Incheon Free Economic Zone (IFEZ), Korea. Major lessons from experiences of Pudong Free Economic Zone (Pudong FEZ) are as follows. Concentration first on the development of infrastructure via domestic sources is needed. Investment incentives equaling those of Pudong FEZ are required and providing a variety of domestic business companies' information for foreign investors in order to promote joint venture is important. Promoting communication in English is urgent and more foreigner-oriented hospitals and schools are needed. Implications for IFEZ, Korea are a strong support from the central government to develop IFEZ and an effective one governing system with deregulation and one-stop service is important.

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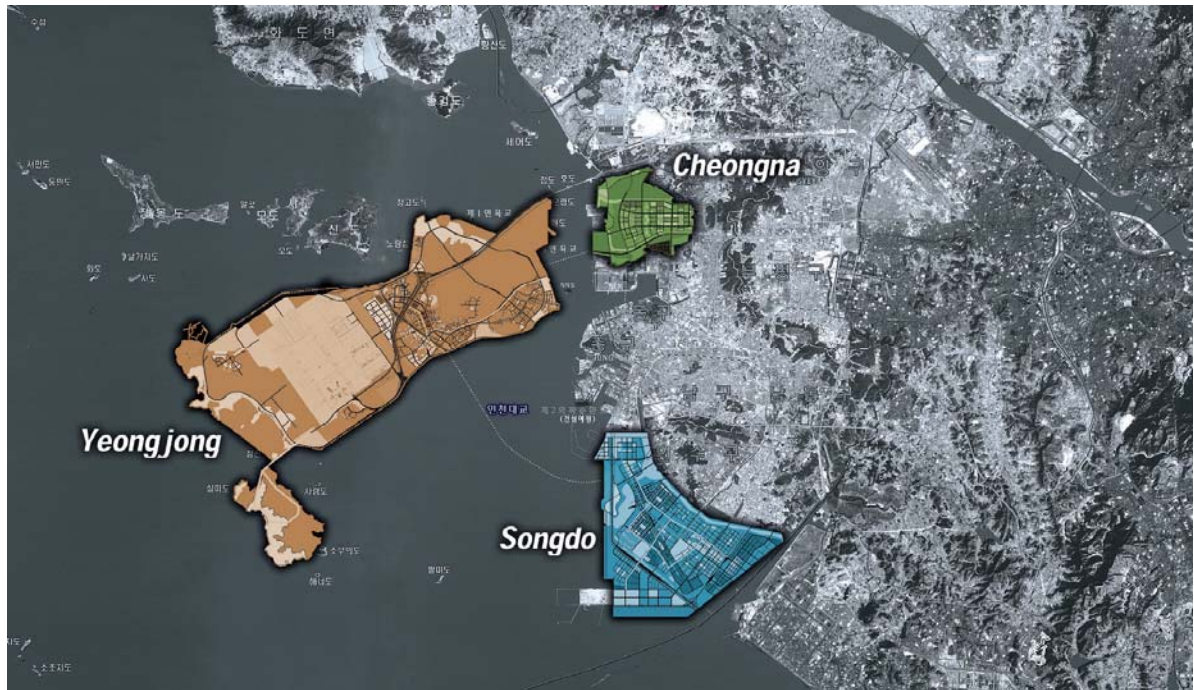
I. Introduction

Background

As a consequence of the 1997 economic crisis in Asia, Korea introduced stronger, more market-oriented economic restructuring policies and has since successfully recovered from the economic difficulties that resulted from International Monetary Fund (IMF) control. However, along with the post-crisis economic restructuring, Korean leaders recognized that the traditional manufacturing could no longer guarantee stable economic growth. They needed to come up with a new engine of development for the economy of the future. Furthermore, they believed that the accelerating growth of the already huge Chinese economy would present a threat in the very near future to Korea's economy. In comparison to China's economy, the Korean economy has been slow due to economic stagnation and increasing unemployment. According to the Ministry of Economy and Finance in 2007, the Korean economy's growth should be 4 % in 2007. In contrast, Chinese economic development has been brilliant. China's economy has grown approximately 10% per year since the 1980s (Kim, 2004).

Consequently, Korea's national government started the Northeast Asian countries business hub project in April of 2002. So, Free Economic Zones were created to attract more Direct Foreign Investment in accordance with the Free Economic Zone Law in 2004. Korea now has three Free Economic Zones: Incheon, Busan and Jinhae, and Gwangyang areas. This paper concentrates on the Incheon Free Economic Zone (IFEZ) because it was designated first and has the most potential in terms of social overhead capital and market-oriented location in three areas.

Figure 1 Incheon Free Economic Zone



Source: Incheon Free Economic Zone Authority in 2005

When it comes to comparing Foreign Direct Investment (FDI) between Korean and China, China has many benefits such as tax incentives to attract foreign direct investments. As a result, China has succeeded in attracting a great deal of foreign direct investment. According to Shanghai Municipal Government in 2007, Pudong area showed \$25.2 billion of foreign direct investment in 2006. On the contrary, Incheon Free Economic Zone (IFEZ) is still in its infancy and trying to show good rate of developments. According to IFEZ Authority in 2005, the contracted FDI reaches \$ 1.5 billion with 34 contracts. (Accumulated from 2003 – 2005)

If the Incheon Metropolitan government hopes to sharpen the competitive edge of IFEZ, they should first find out what kinds of factors are attractive to foreign investors. Therefore, I compare infrastructure, business environment and living environment for

foreigners of IFEZ with those of Pudong Free Economic Zone (Pudong FEZ). I would like to find out what investment promotion plans for IFEZ are needed through comparison with the Pudong FEZ, China. It seems likely that lessons from experiences in Pudong, China would be helpful in making IFEZ a success in attracting FDI.

Research Questions

I focus on the following two questions:

- 1) What are the factors leading to success of the Pudong FEZ in attracting FDI and what lessons can be drawn from those experiences?

- 2) What actions should be taken into account in order to make IFEZ a success, given the particular circumstances in Korea?

My hope is that this project will be a helpful guide for policy makers in attracting FDI for IFEZ. Furthermore, I hope it will provide insights into the development of IFEZ for those interested in this scheme, either for scholarly or practical reasons.

Methodology

- 1) Documentation analysis
- 2) Semi structured e-mail & phone interview with foreign investors in Incheon:
about 15 persons
 1. How much do you know about Pudong, China?
 - 1) Very much 2) Much 3) So, So 4) A little 5) Little

2. Comparison of investment environment between IFEZ and Pudong FEZ

No.	Indicator	Pudong very highly Superior	Pudong superior	Same	Incheon superior	Incheon Very highly superior
1	Social Overhead Infrastructure					
2	Business Environment					
3	Living Environment					
4	Gov't support					
5	Favorable image					

3. What are the obstacles to your investment in IFEZ? Please choose 2.

a. Infrastructure (please choose 1)

- 1) Seaport
- 2) Airport
- 3) Road

b. Business Environment (please choose 2)

- 1) Structure of industry
- 2) Average labor cost
- 3) Rent fee
- 4) Human capital
- 5) Information Technology
- 6) Institutional quality(bureaucratic quality, property rights, corruption index)
- 7) Openness (Trade, FDI)
- 8) Investment incentives

c. Living Environment (please choose 2)

- 1) Cost of living
- 2) Communication
- 3) School/hospital for foreigners
- 4) Institutional policy for foreigners

4. What kind of information or service do you need to help you make your decision about investing in the IFEZ? Please choose 2.

- a. Investment incentives
- b. Government administration support
- c. Information on markets and marketing
- d. Information on joint venture
- e. Others (Please describe specifically)

5. Any thing to comments on investment promotion policy of IFEZ?

Chapter 2 provides an overview of Free Economic Zones based on research documents. Here I introduce the definition of and various types of FEZ. Moreover, functions of economic development in FEZ will be discussed. Finally, I will introduce the current situation of IFEZ and its Strength, Weakness, Opportunity, Threat (SWOT) analysis.

Chapter 3 explains experiences in Pudong and comparison to IFEZ. It includes comparisons of major features between Pudong and IFEZ in terms of Social Overhead Capital, business environment and living environment for foreigners.

Chapter 4 summarizes the analysis of the preceding chapters. In this chapter, I return to the two research questions posed in the introduction. The chapter identifies lessons learned from experiences with Pudong FEZ. Finally, this chapter also briefly discusses implications for IFEZ, Korea.

II. A Review of Free Economic Zone, its Functions and Incheon Free Economic Zone

Definition and Types of Free Economic Zone

It is generally accepted that the first modern-day Free Zone was a program to attract manufacturers to export from Puerto Rico in 1951. Today, there may be as many as 900 FEZs of various types in about 90 countries and regions of the world (Meng, 2003). There are a lot of definitions for FEZs, as Guangwen Meng says “in order to realize certain economic and political objectives, FEZ is geographically defined in an area or zone inside a country or in a cross-border area between several countries where certain economic activities are especially allowed.”(Meng, 2003) According to the Ministry of Finance and Economy of Korea, the FEZ is a self - sufficient area that offers comprehensive services such as residential facilities, air & seaports support, a logistics complex, an international business center, educational & medical institutions, and financial services. In Free Economic Zone Law, Article 23, FEZ is defined as follow.

“The term ‘Free Economic Zone’ means the zone, which is developed with the aim of improving the business environment for foreign-invested enterprises and the living conditions for foreigners.”

In other words, the FEZ is the special area where compared to the rest of Korea exceptional measures are made, such as tax breaks and other incentives to foreign invested firms, expanded foreign exchange circulation, foreign language service, labor flexibility, and establishment of foreign education and medical institutions. So, I prefer to use FEZ as a designated area to provide foreign-invested enterprises with an optimal

business and living environment in order to attract foreign investment in high-end industries and global service.

There are many terms that are used to define similar free zones. Some of these terms are : free zone, free port, customs free zone, export processing zone, foreign trade zone, free production zone, free trade zone, industrial free zone, tax free zone, customs free airport, foreign access zone(Meng, 2003). Here, I would like to introduce Meng’s FEZ typological diversity based on industrial structure because it tried to analyze the FEZ’s development stage. Table II-1 below shows the FEZs diversity based on industrial structure and evolutionary stage.

Table II-1 FEZ Evolution Stage

Stage	Type	Feature
The 1 st Generation	Trade-based FEZ	Free port, customs free zone, tax free zone
The 2 nd Generation	Manufacture-based FEZ	Export free zone, Free enterprise zone, Import processing Zone
The 3 rd Generation	Service-based FEZ	Free tourist zone, free gambling zone
The 4 th Generation	Science-based FEZ	High-tech zone, science-based park
The 5 th Generation	Comprehensive FEZ	Free economic zone, comprehensive free port
The 6 th Generation	Cross-border FEZ	Cross-border economic cooperation zone

Source: Guangwen Meng (2003)

When looking into the current development of the Pudong FEZ, the Pudong FEZ is aiming at the 5th generation of comprehensive FEZ because knowledge-based economy is thriving in the Pudong FEZ. So, I think that it is necessary for IFEZ to get an advanced projected target model of FEZ development model.

Function in Economic Development

In general, these FEZs intend to stimulate economic growth and development. To cope with the increased competition among nations for jobs, industry, and capital, they are designed to promote competitiveness by encouraging companies to maintain and expand their operations. (Ministry of Finance and Economy of Korea, 2003) One of the important roles of FEZ is to attract FDI. So, it is necessary to look into the function of economic development in FEZ in terms of FDI attraction. There have been big changes in the FDI concepts in two decades. Until the 1980s, most developing countries viewed FDI with great wariness. However, in recent years, FDI has come to be welcomed by most developing countries as not just a source of investment funds, but also as an important source of new technology. (Brooks & Basingstoke, 2004). At the same time, FDI inflows include the following positive effects i) Foreign firms bring superior technology ii) foreign investment increases competition in the host economy iii) Foreign investment typically results in increased domestic investment iv) Foreign investment gives advantages in terms of export market access arising from economies of scale in foreign firms' marketing or from their ability to gain market access v) Foreign investment can aid in bridging a host country's foreign exchange gap. At the same time, there are negative effects of FDI such as monopoly creation, unemployment, technology dependence, profit outflow, and national security (Brooks & Basingstoke, 2004).

When studying the function of economic development in FEZ, it is helpful to take a look at China's case. According to the study "Free Economic Zone in Korea" by Kim, Giwan in 2004, there were four FEZs set up in the early 1980s in China. Many of the policy restrictions on investment and trade were relaxed in FEZs to attract FDI and get

economic development. There were a lot of tax breaks and incentives because of three main reasons the Chinese government had for offering special privileges in the FEZs. First, it was far easier to start by creating a better business climate for FDI in small areas than in the country as a whole. Second, the government wanted to open the door gradually, without imposing a violent shock on the economy. And third, it wanted to learn from these pilot areas before introducing nationwide reforms. (Kim, 2004) In general this strategy was successful. FDI increased gradually throughout the 1980s and the economy grew by 10 percent annually during the decade.

II-2 FDI Development in China

Period	1985	1990	1995	2001
Total FDI(\$billion)	0.9	3.2	37.3	46.4

Source: National Bureau of Statistics of China (2002)

Unlike Taiwan, Singapore, and China, which actively sought to attract foreign enterprises to their markets, Korea focused on the development of domestic firms by borrowing funds from foreign lenders. As a result, FDI accounted for less than 1 percent gross domestic fixed capital formation up through the mid 1990s. Then, in the aftermath of Korea's financial crisis of 1997 -98, the amount of FDI flowing into Korea rose dramatically, as did its ratio to the scale of the Korean economy. (Kim, 2004) According to the findings of the Korean Institute for Industrial Economics & Trade, in 2001, the share of domestic employees retained by FDI-related enterprises increased from 5.9 percent in 1998 to 8.3 percent in 2001. Furthermore, KIET has emphasized that the impact of FDI on domestic production has significantly exceeded its effect on gross domestic fixed capital formation. Also, FDI helped to ameliorate Korea's balance of payments problem by boosting export. With an export of \$21.3 billion and imports of

\$16.5 billion in 1999, foreign-invested enterprises generated a \$4.8 billion trade surplus for Korea. The following table II-3 shows the current FDI comparison between the Republic of China and the Republic of Korea.

Table II-3 FDI Comparison between China and Korea

	People Republic of China	Republic of Korea
General overview	<ul style="list-style-type: none"> • #1 Recipient of FDI in the world • Rapid economic growth of 9.3%(1978 – 2002) 	<ul style="list-style-type: none"> • Worked to liberalize FDI since 1962 • Foreign borrowings development strategy than FDI
Overview of FDI	<ul style="list-style-type: none"> • Four Special Economic Zones(1981) • Sectoral distribution (2001):Manufacturing(66%), Services(24%) • Source of FDI(1987-2001) :Hong Kong(35%), U.S(9.4%),Japan(9.3%) 	<ul style="list-style-type: none"> • Big turning point of FDI : financial crisis (1997) • Sectoral distribution (1991-2001):Manufacturing(52%), Services(46%) • Source of FDI(1993-2002) :U.S &EU (75%) • Outward FDI(\$4.25 billion in1996)
Effect of FDI	<ul style="list-style-type: none"> • Employment : Less clear & small • International trade: no direct relationship • Income Distribution: higher in MNEs • Competition ; Increased 	<ul style="list-style-type: none"> • Case Study for spillover effect <ul style="list-style-type: none"> - semiconductor: joint venture - Distribution ; increased completion &improved productivity - Banking : reduced profitability of local banks by increasing competition after financial crisis
FDI policies	<ul style="list-style-type: none"> • Preferential Taxation & Regional Differentials • Preferential land access • 4 special economic zones 	<ul style="list-style-type: none"> • Slow and Steady open to FDI (1962-1997) • Big Bang open to FDI after financial crisis (1997)

Source: Douglas H. Brooks & Hal Hill Basingstoke, 2004

What IFEZ is: Overview of IFEZ and its Strength, Weakness, Opportunity and Threat (SWOT) analysis

1. Background of Incheon Free Economic Zone (IFEZ)

The Northeast Asian region is one of the fastest growing economic blocs of the world. Three countries of the region, Korea, China and Japan, serve as a driving force for the growth and development of the world.(See table II-4) In particular, China is now known as the “Factory of the World.” According to the “Korea Report” by Booz Allen, Hamilton(1997), if Korea can not take advantage of the changes in the world economic trend, it will become the ‘nut in the nutcracker’ between China (low cost) and Japan (high technology). As the table II-4 below shows, the share of world trade by the two countries is 6.5 % to 12.1 %. Also two countries ranked 3 and 4 in the case of export ranking and 3 and 6 in import ranking, except for the EU. According to the 2005 World fact book, China and Japan ranked as number 3rd and 4th the GDP ranking. According to the 2005 World Fact Book, Korea’s GDP ranking was 14th.

Table II-4 World Trade in Merchandize and Commercial Services

Country	GDP*	Merchandise		Commercial Service	
		Export	Import	Export	Import
	Share(Rank)	Share(Rank)	Share(Rank)	Share(Rank)	Share(Rank)
Japan	6.7 (4)	6.3 (3)	4.9 (6)	3.9(7)	6.2 (4)
China	13.1 (3)	5.8 (4)	5.3 (3)	2.6(9)	3.1 (8)
Total	19.8	12.1	10.2	6.5	9.3

Source: WTO, Leading exporters and importers in world trade in merchandise and commercial service, 2003 (<http://www.wto.org>)

However, Korea is strategically located in the center of the vast markets between China and Japan, and is perfectly placed to access the abundant resources from the Russian Far East. Northeast Asia is becoming one of the most dynamic areas of the world economy.

Figure 2 Geographic Coverage of Northeast Asia



Source: Presentation material made by Ahn, Choong-Yang. President of Korea Institute for International Economic Policy, 2005

Thus, the best strategy for Korea's survival is to make the best use of its economic and geopolitical location between China and Japan, and to fill the role of a 'Facilitator' or an 'Intermediary' networking China and Japan as an 'Economic Hub in Northeast Asia' over the next five to ten years (Yeom, 2004).

In 2003, the government, ruled by new president Roh, announced the Northeast Asian economic hub country plan as an important agenda. As a means of coping with the changing global environment the Korean government designated Incheon in

2003 as the country's first Free Economic Zone (FEZ) ahead of those later located at Busan and Gwangyang Bay in the south of the country.

2. Overview of the Incheon Free Economic Zone

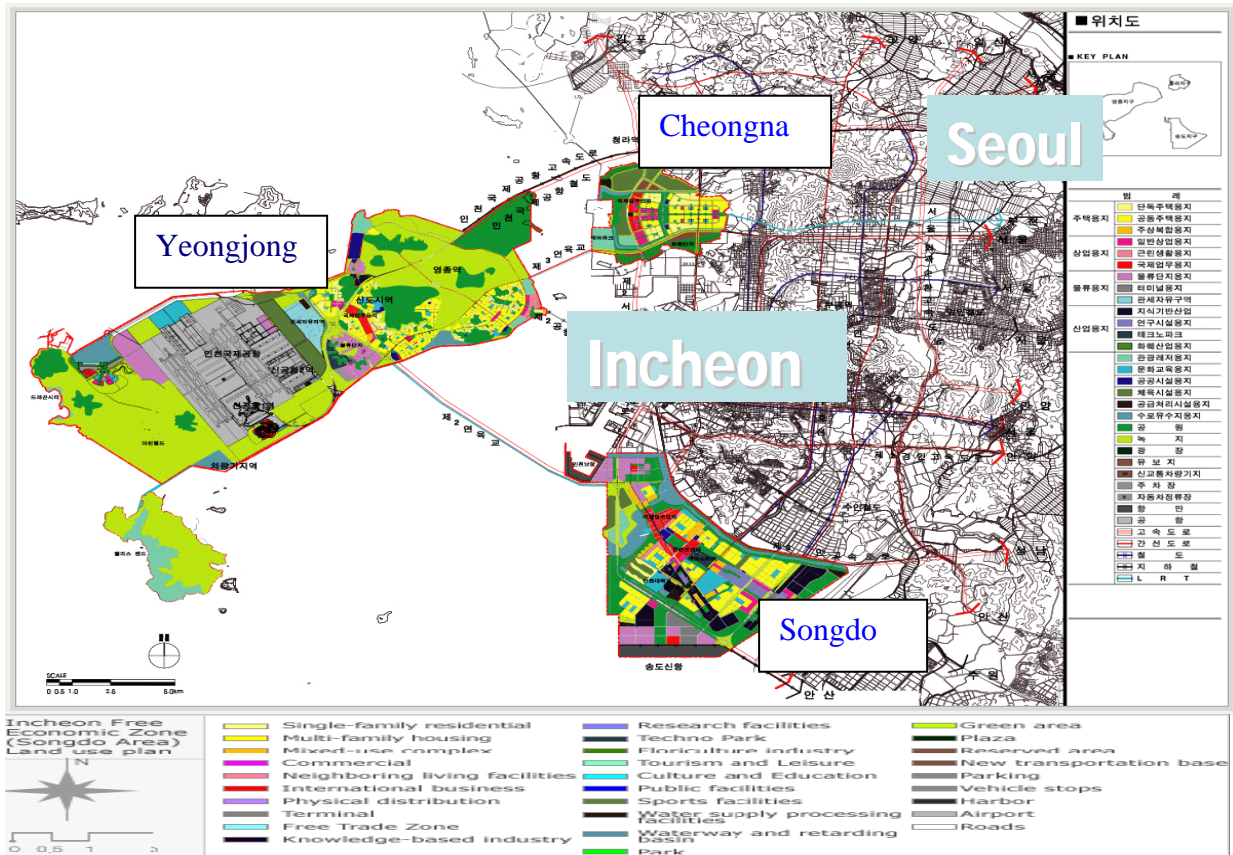
The IFEZ project comprises three separate districts within Incheon Metropolitan City covering 51,862 Acres— the Cheongna reclaimed area, Songdo and Yeongjong which surrounds Incheon international airport. These areas are earmarked for major projects between 2003 and 2020:

Table II-5 Planned Population and Development Strategy

Area	Total Size (Acre)	Planned Population	Project Period	Development Strategy
Total	51,862	487,300	2003-2020	
Songdo	13,260	252,500	2003-2020	International Business Center IT & BT Industry
Yeongjong	34,183	144,800	2003-2002	Logistics Hub
Cheongna	4,419	90,000	2003-2008	International Finance Center

Source: Incheon Free Economic Zone Authority

Figure 3 Incheon Free Economic Zone Development Plan

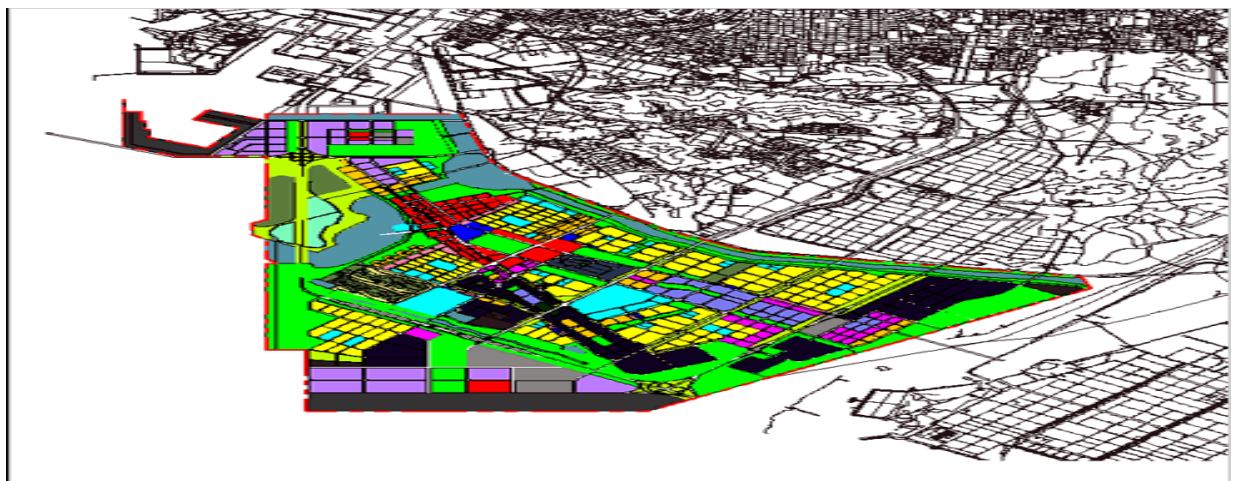


Source: Incheon Free Economic Zone Authority (2005)

(1) Songdo Area (13,145 acres) Development Plan

New Songdo City will be developed in 3 phases by 2020. For the first phase, an International Convention Center and 65- story landmark building, office buildings, deluxe hotels, shopping malls, and golf course will be built by 2008. Currently under construction, "Techno Park" will be completed by 2004 and the Korean Institute of Technology along with other research centers and venture start-ups will begin moving there in 2004. A Knowledge-based Industrial Complex, and Bio Complex will also be built by 2008.

Figure 4 Songdo Plan Blue Print

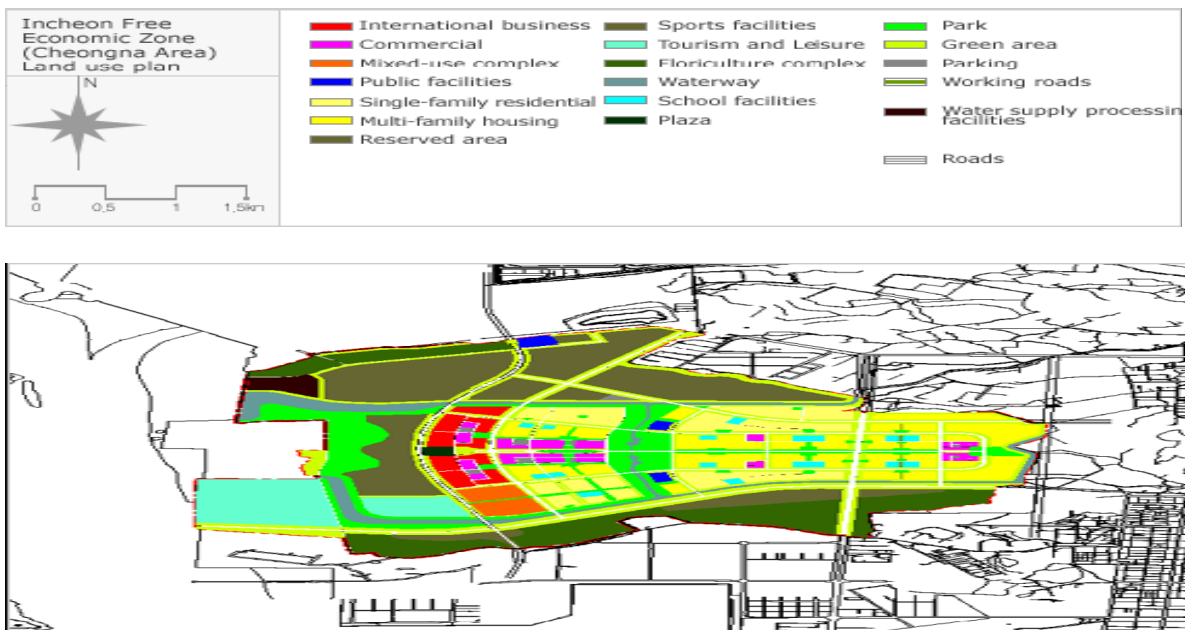


Source: Incheon Free Economic Zone Authority (2005)

(2) Cheongna Area (4,400Acres) Development Plan

Cheongna, with beautiful natural resources, will be developed as an international business, culture and recreational site for foreign investors, tourists and metropolitan residents. Plans include a beautiful floral complex, spacious golf course, and a sports and leisure complex, to be followed by a theme park and other recreational facilities. The Cheongna area provides excellent traffic routes to Incheon International Airport, making it a convenient location to live for international business personnel. The business traveler can easily commute to any destination in Northeast Asia within 24 hours. Since this part of Korea is located in a metropolitan area, it already has all the amenities required by tourists and services needed for an international financial and leisure complex.

Figure 5 Cheongna Plan Blueprint (4,400 Acre)



Source: Incheon Free Economic Zone Authority (2005)

(3) Yeongjong Area Development Plan (34,183 Acres)

With the world's 3rd largest cargo capacity, Yeongjong area will be developed as an international logistics base and airport support area by 2020. Yongyu & Muui area, approximately 150 islets scattered in the West Sea with abundant tourism resources including scenic vistas and sand beaches, will be created as an international leisure complex linking with Incheon International airport.

Figure 6 Yeongjong Plan Blueprint



Source: Incheon Free Economic Zone Authority (2005)

(4) Investment current status in Incheon Free Economic Zone

The following figure shows us the current investment status in IFEZ. The red signs ; such as DHL, TNT , Yonsei University ,etc mean that these are under construction with

completed contracts and blue signs mean that these contracts are under negotiation for business in IFEZ. According to IFEZ Authority in 2005, the contracted FDI reaches \$ 1.5 billion with 34 contracts. (Accumulated from 2003 – 2005)

Figure 7 Investment Update in IFEZ

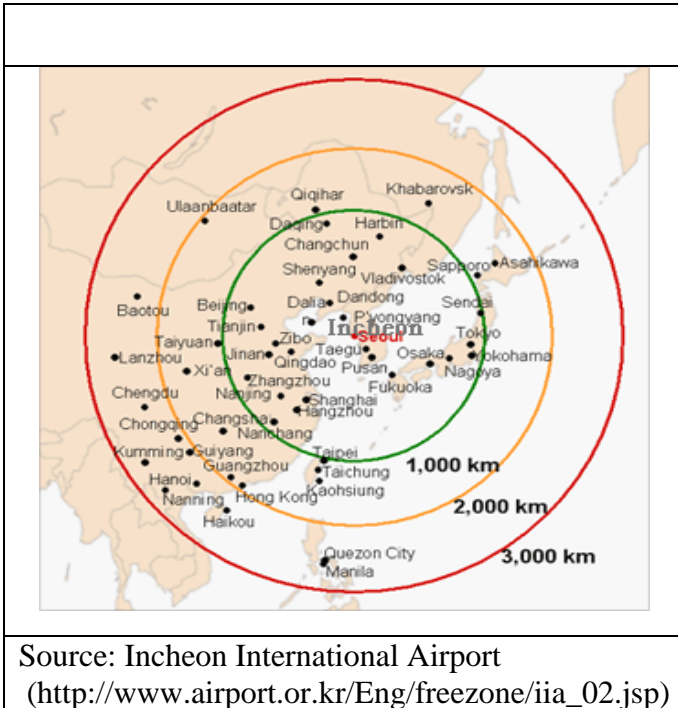


Source: Incheon Free Economic Zone Authority (2005)

Incheon Free Economic Zone SWOT Analysis

1. Strengths and Opportunities

Figure 8 Three and an half Hour Flight Time Distance from Incheon



Firstly, Incheon has many advantages that are ideal for establishing a free economic zone. It is a coastal city equipped with an internationally competitive seaport and an airport that is the main entry point to Korea. Two billion people, or 32 % of the world's population, live within 3.5 hours of flight time from Incheon. and 51 cities each with populations over 1 million are located within 3.5 hours of flight time from Incheon International

Source: Incheon International Airport
(http://www.airport.or.kr/Eng/freezone/iaa_02.jsp)

Airport. Since its commercial opening on March 29, 2001, Incheon International Airport has grown to become the 5th ranking airport in terms of cargo traffic. (Jeon, 2003)

Secondly, Incheon is adjacent to Korea's Capital of Seoul, so it has a well-organized social overhead capital. As the nation's manufacturing leader, the Capital Region accounts for more than 50 per cent of the nation's manufacturing enterprises and almost 50 per cent of the nation's well educated workforce (See table II-6) This latter figure is exceeded in finance and insurance, real estate and business activities- comprising computer and related activities, research and development, professional, scientific and technical services and business support services.

Table II-6 population of Korea, Seoul, Incheon, Gyeonggi and Capital Region
Population unit : million

	1985	1990	1995	2000	2005
Korea	40.5	43.2	44.6	46.1	48.3
Seoul	9.6	10.6	10.2	9.9	9.9
Incheon	1.4	1.8	2.3	2.5	2.6
Gyeonggi	4.8	6.2	7.6	9.0	10.1
Capital Region	15.8	18.6	20.1	21.4	22.6
<i>Ration (Korea/Capital Region)</i>	<i>39.1 %</i>	<i>42.8 %</i>	<i>45.2 %</i>	<i>46.3 %</i>	<i>46.7%</i>

Source : Incheon Development Research Center(2004)

Thirdly, according to Hobday & Lee research (2002), other countries in the area of Northeast Asia can be defined by their disadvantages. For example, Japan has been in economic stagnation for the last 10 years and its economic uncertainty might continue. China still has poor and unbalanced infrastructures and no single governmental authority. Elsewhere, other Northeast Asian countries such as Indonesia, Thailand and Singapore have a relatively small market or are too far away from the major growth market of Northeast Asia. Consequently Korea has a competitive advantage over these other countries. Next, the Korean market is seven times the size of the Association of Southeastern Asian Nations. Therefore, it can be a test market for the region, and its infrastructure for high-tech manufacturing is very good.

Finally, Korea including Incheon has a plentitude of highly educated human resources. For example, The National Science Foundation, an independent federal agency in U.S , press release on Jan23.2003 shows “The largest foreign contributors of students with undergraduate degrees to U.S doctoral programs were Seoul National

University(1,655), National Taiwan University (1,190) and Beijing University(1,153)”
This is impressive data regarding Koreans’ educational investments. Korea’s Seoul National University ranks the 1st among foreign countries in earning doctoral degree in the U.S

2. Weaknesses and Threats

Firstly, there has been a dispute over a new governing body for IFEZ. Despite escalating concerns from foreign investors of the free economic zone, the government and free economic zone authorities have dragged out the battle over forming a new governing body for the zones. IFEZ authorities, including the mayor of Incheon, stand rigorously opposed because the new organization would include central government officials who would wield more influence than before. The Finance Ministry of central government, however, insists it is crucial for the sake of efficiency. The central government has expressed mounting frustration at the slow pace of progress in Korea’s three free economic zones that were created in Incheon, Busan-Jinhae and Gwangyang in 2003. Designed to play a central role in the administration’s plans to evolve into a logistics and financial hub, tax benefits and other incentives were implemented in the zones in hopes of attracting foreign investors. It will take a long time to solve the problem because the local election will be held in June this year. After the local election, the dispute about whether to make a new governing body may be discussed. So, the improvement of the efficiency of the IFEZ Authority system will be in trouble for the time being.

Secondly, there is a strong opposition from labor unions and civic organization to the development of IFEZ. The 'Democratic Labor Party', the third largest party in Korea, and a politically radical group argues that IFEZ bring about serious inequality among laborers in Korea. They assert that Korea has one of the highest rates of temporary workers among members of the Organization for Economic Cooperation and Development; 36.6 percent of the total workforce or 5.48 million in 2005. So, the flexibility of the labor market of IFEZ would worsen the labor condition for Korean workers. At the same time, some of the incentives offered in the free economic zones have also invited concerns from civic activists over possible negative side effects. Civic activists fear expensive foreign schools, which will be opened in 2008 in IFEZ, would widen the education gap between the rich and the poor.

Thirdly, the economic development strategy of IFEZ is business attraction focused on international businesses. Thus the success of the strategy largely depends on national competitiveness. From the view of a foreign business, one of the important priorities of its location search is the business environment, such as labor relations, administrative procedures, production costs and practices of financial institutions etc. According to the Korea Development Institute in 2003, Korea is not among the higher ranking of major competing countries in the Northeast Asia in terms of national competitiveness. Although Korea's national competitiveness ranking had reached the top 10 in the world in 2002, it had fallen down to 15th in the world in 2003.(KDI , 2003) This is because the effectiveness of the structural renovation policies, made to overcome the financial crisis after 1997, has been gradually weakened.

Table II-7 National Competitiveness Rankings of 6 Asian countries (2001-2003)

Country	2001	2002	2003
Taiwan	5	7	6
Malaysia	10	6	4
Japan	9	11	11
China	12	12	12
Thailand	14	13	10
Korea	11	10	15

Source: International Management Development (KDI, 2003)

Finally, it is often pointed out that North Korea is a detriment to the development of IFEZ because foreign investors really don't want a second Korean War. North Korea's nuclear experiment on Oct.9 2006 surprised the world. Almost all Koreans, plus foreign investors, were worried by the incident because it might bring about disaster in the Korean peninsula. Nobody surely knows what is going on with North Korea's nuclear experimentation, but it is sure that risky actions from North Korea would worsen the business climate of IFEZ, especially concerning FDI attractions.

Summary

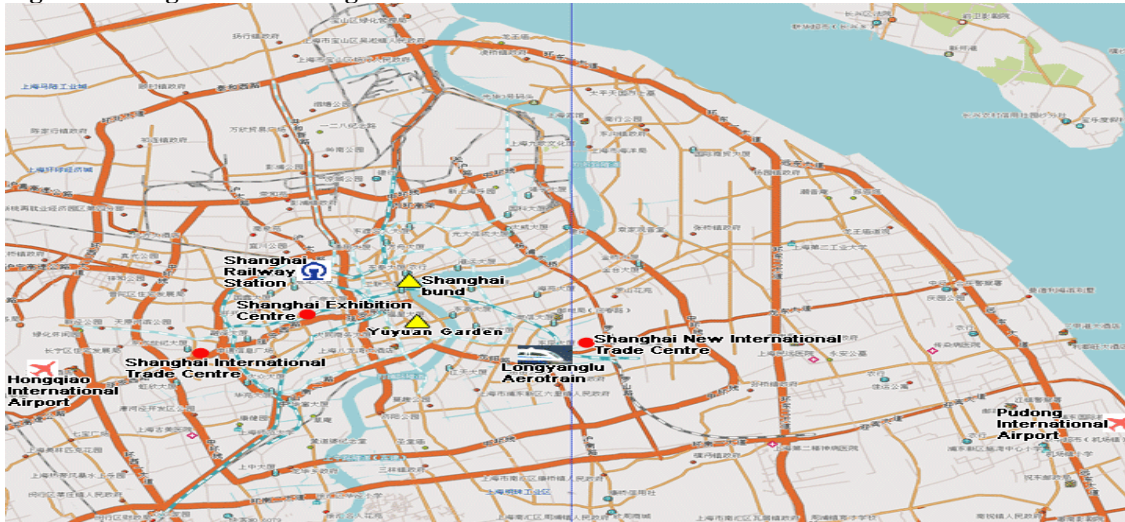
There are as many as 900 FEZs of various types in about 90 countries and regions of the world. IFEZ was created to attract FDI which would play an important role in the thriving Korean economy. The IFEZ project comprises three separate districts within Incheon Metropolitan City covering 51,862 acres. According to the IFEZ SWOT analysis, strengths and opportunities shows that IFEZ has an ideal location for FEZ, a well-equipped infrastructure and big market with highly educated human resources. However, weakness and threats are as follows. There is a dispute over a new governing body, strong opposition from labor unions and Korea's national competitiveness ranking is down. Moreover, North Korea's nuclear experiment would be a major obstacle in attracting FDI

for IFEZ. On the basis of current IFEZ development, I would like to explain experiences in Pudong FEZ and make a comparison to IFEZ in the next chapter. It includes comparisons of major features between Pudong FEZ and IFEZ in terms of infrastructure, business environment and living environment.

III. Experiences of Pudong and Comparison with IFEZ

Overview of Pudong

Figure 9 Shanghai and Pudong FEZ



Source: Shanghai Municipal Government in 2005

Pudong FEZ, officially known as Pudong New District, is a district of Shanghai, China. Since the beginning of its development in the 1980s, Pudong has emerged as China's financial and commercial hub. (Andrew & Wei, 2003) Located on the east coast of the Huangpu River, Pudong FEZ covers a land mass of 570 square kilometers and have permanent residents totaling 2.8 million. (Table III-1) Facing the Pacific Ocean and the East China Sea, with the Yangtze River on the north, and the rich Yangtze River Delta in its backyard, Pudong FEZ is regarded as a gate to China and a bridge connecting the economy of China with the world. (Pudong FEZ Administration, 2005)

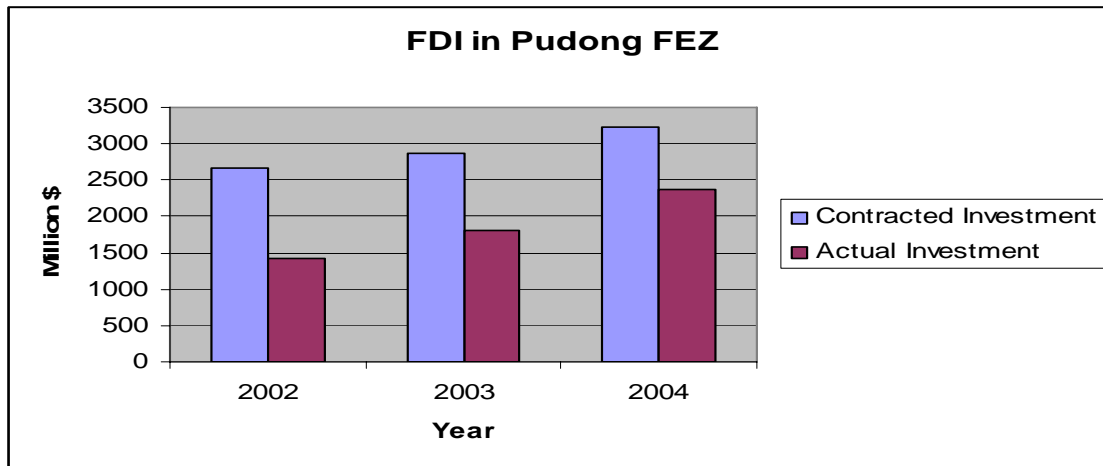
Table III-1 Shanghai VS Pudong FEZ (2004)

	Shanghai	Pudong FEZ	Ratio
Population	17 million	2.8 million	15.7%
Area	6,341 km ²	570 km ²	8.4%
GDP (CNY billion)	9,143	2,108	23.1%
Growth Rate	11.1%	12.1%	
FDI(\$ billion)	68.5	\$ 31.1	45.4%

Source: Shanghai Municipal Government 2005

In 2004, a total of 31.1 billion USD was attracted into the Pudong FEZ, accounting for half of Shanghai's total. (Table III -2) The actual arrival of foreign investment amounted to 23.7 billion USD, 32.1% up. The table below shows the FDI in Pudong FEZ, China.

Figure 9 Foreign Direct Investments



Source: Pudong Government in 2005

Main Strategy and Development Process of Pudong FEZ

1. Background

In order to understand the background for the development of Pudong FEZ, it is necessary to pay attention to China's economic and political context in the 1990s. The impetus for developing Pudong emerged from a combination of international, national, regional and local circumstances (Andrew & Wei, 2003). China's overall rate of growth had slowed considerably from 11.3 percent in 1988 to 3.8 percent in 1990 and at one point inflation had exceeded 20 percent during the same period. (State Statistics Bureau, 1991). Meanwhile, command economy structure was not fully resolving problems of production especially in the state owned sector which remained dominant in Shanghai that that time (Andrew & Wei, 2003). Indeed, all economic actors in China came under pressure to respond to accelerating economic globalization. (Andrew & Wei, 2003). According to the Pudong FEZ government, the decision is as follows (www.pudong.gov.cn).

“On April 18, 1990, the Central Government of the People Republic of China (PRC) officially announced the decision on the development and opening-up of Pudong FEZ to the whole world. In October 1992, the 14th National Congress of the PRC made an important proposal that Pudong should, and must, play a leading role in the further development and opening-up of the coastal cities along the Yangtze River, in the new round of the economic boom in the area of the Yangtze River Delta and even in the whole drainage basin of the Yangtze River.”

2. Goals and Main Strategy of Pudong FEZ

The goals under the Pudong FEZ Plan are clearly outlined by the State Council and the Shanghai government of 1997. According to the Shanghai Government Report in 1997, goals include :attracting domestic and overseas capital, expansion of international trade, integration into the global economy, increasing high-tech industry, development of export oriented and import-substitution industries, integration of Pudong into the fabric of Shanghai and the transformation of Shanghai into an international financial and trade center. Import substitution industries include electronics, computer hardware, software and industrial instruments. The ambitious goal of Pudong is to build Pudong into a highland of world-level advanced manufacturing industry, of modern service industries and of innovative and creative industries in Shanghai, by means of persisting on the joint development of the secondary and tertiary industries.(Shanghai Municipal Government, 2005) Under these goals, several important strategies were made by Shanghai Municipal Government in 1992. According to Andrew & Wei, 2003, it can be summarized as follows. Firstly, Plans for the Pudong FEZ were to consider its overall economic, social and ecological development in a sustainable way. Secondly, in terms of industrial development, priority was to be given to finance, trade and advanced services, high technology and tourism with a focus on large investors. Thirdly, urban development was to emphasize the construction of infrastructure and an ecological environment. Fourthly, urban planning and industrial development of Pudong was to be integrated with the re-development of old parts of Shanghai to the west of the Huangpu River in Puxi. These goals and strategies have been integrated into the land use plan for Pudong. (Andrew & Wei, 2003)

3. Development Process and Accomplishments in Pudong FEZ

The Shanghai Municipal Government started to develop the Pudong FEZ under the strong political support of the central government of China in 1990.(Andrew & Wei, 2003) According to Kihwan Kim in 2006, the development of Pudong FEZ has been built in four stages. He described how the four stages run as follows.

Stage one includes overall substantive preparations. During this stage, the Pudong Development Office and the Research Office of Planning were established in 1990 to undertake investigations and to work out a practical scheme for the development of Pudong FEZ. At that time, the preparation & advertisement of new preferential policies was well underway when paramount leader Deng Xiaoping made his now famous southern inspection tour in early 1992. Stage two was concerned with infrastructure construction on a large scale. Between 1990 and 1995 nearly US \$2.8 billion was invested in transportation links between Pudong and Puxi including two bridges and several less high profile projects in telecommunications, water and gas systems and electricity supply (Kim, 2006). Stage three was concerned with continuing infrastructure construction and simultaneous functional development between 1996 and 2000. While many commentators have emphasized the importance of FDI, it is noteworthy that fully two-thirds of fixed asset investment has come from domestic sources. (Andrew & Wei, 2003) Also, more open policies for foreign investors were made by Shanghai Municipal Government. For example, the People's Bank of China granted permission to qualified foreign banks based in Shanghai to conduct business. The New Area has been encouraging the settlement and development of Hi-tech industries, the headquarters of transnational enterprises, research and development organizations both at home and

abroad and modern service industries in Pudong. Some favorite policies unique to Pudong were made to meet the demands of the economic development of the nation, the Municipality and the New Area. Such policies are either intended to further simplify the control of the foreign-funded projects or to favor the foreign funded enterprises in Pudong in terms of added value tax, income tax, consumption tax, sales tax, printing tax, municipal real estate tax and the license tag tax of cars and vessels(Kim,2006). Stage four includes functional development and urbanization. In spatial economic terms this phase sees the Pudong FEZ moving towards a more spatially coherent and functionally integrated urban landscape.(Kim, 2006) Currently, there are four key areas of Pudong FEZ, and their developments are as follows.

Table III- 2 Pudong FEZ four sub zones

Sub zone Name	Area	Focus and Comments
Lujazui Functional Zone	43 km ²	Financial and Trade Zone 156 domestic and overseas financial and insurance organizations
Zhangjiang Functional Zone	119.3 km ²	High-tech Park 200 biopharmaceutical enterprises
Jinqiao Functional Zone	90 km ²	Export & Processing Zone ISO14000 National Environmental Protection Standard.
Waigaoqiao Functional Zone	97 km ²	Modern logistics industry would be sustained.

Source: Kellogg on China 2004

Comparison of Major Features between Pudong FEZ and IFEZ

What are the factors causing foreign companies to invest? According to the Organization for Economic Co-operation and Development (OECD) in 2002, there are “three I’s: Incentives, Institutions and Infrastructure.” Also, the Korean Trade and Investment Agency (KOTRA) in 2005, is divided largely into two categories. One is an economic factor such as the size of market, labor cost, investment incentives, and the other factor is a non-economic factor such as business environment- human capital, information technology, living environment- cost of living, communication, and schools/hospitals for foreigners. These can be grouped into three categories – Infrastructure, Business Environment and Living Environment. Each category has a few indicators as follows. In regards to Infrastructure, Seaport and Airport capabilities, including cargo volume, will be compared between the two regions. Structure of industry, average labor cost, rent fee, human capital, information technology, institutional quality, openness and investment incentives will also be compared. Finally, I would like to compare the two regions in terms of cost of living, communication, schools and hospitals availability for foreigners.

1. Infrastructure

(1) Seaport

The IFEZ and Shanghai Pudong FEZ are located in coast area. This is because logistics is a very important thing to business. Shanghai was the world’s third largest container port in 2004.(MOCIE, 2005) Container throughput at the port of Shanghai grew

by a massive annual rate of 35.8% to 8.61 million Twenty-food Equivalent Units(TEU) in 2002, accounting for 23.3% of China’s total throughput of 37 million TEU. And Incheon is the third largest container port in Korea.

Table III-3 Throughput Comparison between Incheon and Shanghai (unit: Thousand TEU)

Region	2003	2004	Ratio Increase
Shanghai port	11,285	14,560	29%
Incheon port	821	934	13%

Source: Unpublished paper of Ministry of Commerce, Industry and Energy (MOCIE) 2005

As the above table III-4 shows, Shanghai port is processes a greater volume in comparison to Incheon port. This is because Shanghai’s hinterland includes all of the Changjiang River Valley, whose trade volume accounted for 29 percent of the entire nation’s trade in 2004 (MOCIE, 2005). Also, 2,800 foreign multinational companies are located in the Pudong FEZ. Most important to that, when comparing the port charges based on 20,000TEU ship between the two ports, Shanghai’s is around \$6, but Incheon’s is \$17.

(2)Airport

Incheon is the key player with airlines. In 2003 Korea’s air hub handled 20 million passengers — the world’s tenth largest international passenger airport. (MOCIE, 2005) According to Ministry of Construction and Traffic of Korea in 2004, Incheon International Airport is a world-class logistics hub. In 2003 it was the world’s third

largest cargo hub, behind Hong Kong and Tokyo Narita, handling over 1.7million tons of cargo, with a significant transfer rate of 47 per cent for transshipments cargos. An advanced computer system is able to handle 2.7 million tons per year with an expected capacity of 4,5 million tons by 2008 when there will be a second runway, and a planned capacity of 7 million tons by 2020.

Table III- 4 Airport comparisons

Category	Incheon International Airport	Shanghai Pudong International Airport
Passengers (Yearly/ million)	27	20
Cargo Volume (Yearly/Thousands)	1700	750
Flights Numbers(Yearly/Thousand)	1700	1200

Source: Ministry of Construction and Traffic of Korea in 2004

On the contrary, Shanghai Pudong only has two international airports in China. These days, Shanghai is making an effort to extend the Shanghai Pudong air port to meet the increasing cargo and passengers. (KOTRA, 2004)

2. Business Environment

(1) Structure of Industry

In my view, the structure of industry shows the development direction intended for the future, so I compared the two region's structure of industry. As table III- 6shows, two regions have similar industry structures focusing on the manufacturing industry.

Table III-5 Comparison of industry structure (Unit: percent)

Sector	Region	2000	2001	2002
Primary	Incheon	1.5	1.3	1.5
	Shanghai	1.8	1.7	1.6
Secondary (Manufacturing)	Incheon	60.4	58.7	54.5
	Shanghai	48.0	47.6	47.4
Service (*Producer Service)	Incheon	38.1	40.0	44.0
	Shanghai	50.2	50.7	51.0

Source: Unpublished Paper of Incheon Development Institute in 2004

Incheon's economic growth has come about based on the manufacturing sector. According to the research of KOTRA in 2003, the export-driven economic development program began in the 1960s when Korea had only plentiful laborers that were both industrious and low cost. Lacking natural resources, Korea had to import them and since Incheon is a coastal port city located close to Seoul, it had a role to play as the gate. Thus Incheon has had a comparative advantage in terms of the importation of natural resources. (KOTRA, 2004) At the same time, the national government has fostered several industrial parks in Incheon. (MOCIE, 2005) At the same time, Shanghai has had similar experiences with Incheon because it is located in a coastal area (KOTRA, 2004). Moreover, the Pudong FEZ industry structure shows Shanghai's development direction, which concentrates more on high value added industry. Pudong FEZ has 64 multinational corporation headquarters.

Table III- 6 Structure of industry in Pudong FEZ in 2004

Sector	Ratio of business (%)
- Primary	0.3%
- Manufacturing	50.8%
- Service	48.9%
* Financing	11.8%
* Logistics	10.1%
* Real estate	8.3%
* Distribution	4.2%
* Information Industry	3.5%
* N/A	11.0%

Source: Unpublished paper of MOCIE 2006

(2) Average Labor cost & Human Capital

Average labor costs in Incheon are about seven times higher than those of Shanghai.(Table III-) As such, Shanghai is a far better region than Incheon in terms of cost saving. However, when considering that foreign companies' salaries are 1.5 times higher than those of domestic companies in Shanghai (KOTRA, 2005), my guess is that the gap would be close to five-fold between Incheon and Shanghai.

Table III- 7 Average labor costs in 2004

Region	Average Salary (\$)	Minimum Wage (\$)
Incheon	2,520	750
Shanghai	360	94

Source; KOTRA 2005

In regards to human capital, about 80% of high school graduates go to college in Korea and Korea ranked 18th according to international experience criteria of International Institute for Management Development (IMD), Switzerland, in 2004.

However, China has a 5% college enrollment rate and senior managers ranked 59th according to the international experience criteria of IMD in 2004.

(3) Factory Site Cost

IFEZ has much higher land prices as table III- 9 shows.

Table III-8 Factory site cost comparison

Region	Price (\$)/per A	Cost in IFEZ / Cost in Pudong FEZ
IFEZ	240	3.55
Pudong FEZ	67.5	

Source: KOTRA 2003

(4) Information Technology

According to the Ministry of Information Technology of Korea in 2004, Korea is number one in the world for internet infrastructure. Korea ranks 6th in the world with 65% internet penetration (Incheon is 72%) and ranks 1st in the world with a high-speed internet subscription rate of 23.4%. A China rank 56th in the world with 7.9% internet penetration, but Shanghai has 45 % internet penetration which is the highest ranking in China.

(5) Institutional Quality & Openness

According to the World Bank Report in 2003, institutional indicators consist of corruption, property rights and bureaucratic rights.

Table III-9 Comparison of institutional quality and openness

Category	China	Korea
* a)Corruption perception index (country ranking)	3.5 (59)	4.5 (40)
b)Property rights	4	2
c)Bureaucratic quality (country ranking)	4.10(50)	4.25(44)

Source: World Bank Report in 2003

*Note: a) The index ranges from 0 (highly corrupt) to 10 (highly clean)

b) The property rights range is from 0 (very good) to 5 (very poor)

c) The higher the index, the higher the quality

In regards to openness, the World Bank Report gives an index of economic freedom. According to the World Bank Report in 2001, China shows 3.6 and Korea shows 2.7. Here 0 means mostly free and 5 means highly restricted.

(6) Investment Incentives: Tax

There are a lot of investment incentives, such as taxation, special education systems for foreigners and special labor laws for foreign investment etc.(KOTRA, 2004) Here, I will compare taxation between IFEZ and Pudong FEZ. In order to promote FDI, both IFEZ and Pudong FEZ provide a wide range of investment incentives, tax reductions and exemptions.

Table III-10 Taxation Comparison between IFEZ and Pudong FEZ

	IFEZ	Pudong FEZ
Target	Foreign investment companies	Both domestic and foreign companies
Corporate tax	25%	30% (15% for foreign

		investment companies)
Tax holidays	Full amount for 3 years , half the amount for 2 years (manufacturing, logistics and tourism only)	Full amount for 2years , half the amount for 3 years (manufacturing, logistics tourism and banking industries only)

Source: Unpublished Paper from MOCIE in 2005

Here, I found two interesting facts: one is Pudong FEZ provides tax holidays for domestic companies and the other is that the banking industry enjoys tax holidays.

3. Living Environment for Foreigners

(1) Cost of Living (Unit: U.S \$)

The cost of living consists of five categories: education fees, traffic costs, healthcare fees, telecommunication fees, rental costs. (KOTRA, 2003)

A) Tuition fees for foreign schools

Table III-11 Comparison of tuition fees for foreign schools

	Pudong FEZ	Korea (Seoul)
Elementary School	18,000	16,000
Middle School	19,000	17,000
High School	20,000	18,000

Source; KOTRA 2003

B) Traffic costs

Table III-12 Comparison of traffic costs

	Pudong FEZ	IFEZ
Subway	0.24	0.86
Bus	0.12	0.86
Taxi	1.20	1.81

Source; KOTRA 2003

C) Healthcare example costs

Table III-13 Comparison of healthcare costs

	Pudong FEZ	Korea (Seoul)
Hospital for cold(No Insurance)	12.70	9
Dental care for scaling	36.25	50
Tylenol (10 capsules)	2.15	2

Source; KOTRA 2003

D) Telecommunication Costs

Table III-14 Comparison of telecommunication costs

	Pudong FEZ	Korea (Seoul)
Telephone (Basic)	3.62	4.95
Celluar (Basic)	6.04	8.57
Internet(Basic)	15.71	24.3

Source; KOTRA 2003

E) Rental costs

Table III-15 Comparison of rental costs

Region	Price (\$)	Condition
Incheon	1,500	Middle class apartment with 3 rooms
Shanghai	1,260	

Source: KOTRA 2003

As above cost of living has shown, living costs in IFEZ are higher than those of Pudong FEZ. However, Korea ranks 3rd in personal security and private property in Asia after Hong Kong and Singapore according to IMD in 2004. Korea is regarded as one of the safest countries in Asia. China ranks 48th in the world in personal security and private property. In regards to Shanghai, it is known for having good rental housing for

foreigners, but Pudong FEZ has one of the most expensive rental fees in China. (KOTRA, 2003)

(2) Communication

When it comes to communication in English, both Korea and China have low scores according to the ETS in 2005. Korea ranked 111th and China ranked 97th. But employees of foreign investment companies in Pudong FEZ are reputed as having good skills in English communication (KOTRA 2003).

(3) School/hospital for foreigners

Shanghai Pudong FEZ has 25 international schools from elementary to high school. There are lots of different models such as American, French, and British style education services. (KOTRA, 2003). IFEZ has no international schools but is planning to build 5. In 2004, the Korean Assembly made a law regarding 'Foreign Schools in IFEZ' which allows domestic people to enroll in foreign schools (30% ratio). As far as medical services, Korea ranks 29th and China ranks 49th according to the IMD in medical infrastructure. However, Shanghai Pudong FEZ already has 30 foreigner-oriented general hospitals, but IFEZ is planning to build foreigner-oriented hospitals in 2009(Unpublished Paper of MOCIE 2006).

Analysis for Success of Pudong FEZ

Located at the eastern bank of the Huangpu River in Shanghai, Pudong was largely an area consisting of shanty houses, dusty factories and farmland, neglected for centuries, until the Chinese government announced its development and opening to the rest of the world on April 18, 1990. (Kim, 2006) The intention of this strategy was to reinvigorate Shanghai as an international trade and financial center, and to turn the city into a locomotive in the development of the Yangtze River Valley. Since then, the 522-square-kilometer area has changed beyond recognition. Billions of U.S. dollars were poured into infrastructure construction, turning the area into a who's who of multinationals including GM, Siemens, Intel and Sharp. Including those just mentioned, nearly 6,000 companies from 67 countries and regions worldwide, including 98 of the world's 500 leading multinational, have invested some 29.4 billion U.S. dollars in Pudong FEZ so far. What are the main factors for the success of Pudong FEZ?

Firstly, as Kim's research says, overall planning has been a main factor contributing to the success of Pudong. As above mentioned in the main strategy, four stages of development plans were carried out by cooperation between central government and local government. The development of the Lujiazui Finance and Trade Zone, for example, consulted master designers from Britain, France, Japan and Italy, thus avoiding haphazard construction. Secondly, sound legal framework has guaranteed the smooth development of Pudong FEZ. To protect the interests of investors, China has come up with more than 100 laws and regulations in different international languages, concerning lower taxes, bonded zones and other areas. (KOTRA, 2003). Thirdly, the strong

investment incentives, such as tax holidays and tax exemptions, attracted many foreign investors. The low corporate tax for foreign companies(15%), mentioned above, with a break for the full amount for 2 years and half the amount for 3 years, for manufacturing, logistics tourism and banking industries, was a huge attraction(Kim, 2006). Fourthly, the Chinese government has been encouraging Pudong to take bold steps in reforms, making it an experimental field for the opening-up drive. For instance, in 1997, Pudong became the first place in China where foreign banks were allowed to handle Renminbi, the local currency. (KOTRA 2003). Finally, it is not overlooked that its geographical location, easy access to the capital, abundance of talented personnel, low labor costs and huge market will add to its superiority (Kim, 2006)

E-mail & Phone Interview Analysis

1. Overview

About 3 years have passed since IFEZ was made to attract FDI and to become a business hub of Northeast Asia. I would like to know about what the obstacles in attracting FDI are and what kind of information or service are needed for future foreign investors.

Here, I have surveyed under the support of the IFEZ Authority. There are 159 foreign companies in Incheon and the IFEZ Authority recommended to me 28 foreign companies that are interested in investing in IFEZ. I e-mailed them and got phone interviews for around 15 minutes each. 15 foreign companies responded to my survey– a response rate of nearly 53 percent. There are 9 manufacturing companies, 3 logistics/transportation companies, 2 real estate developers and 1 distribution company with a broad range of employee numbers, from 9 to 450. The survey was carried out between Apr.9 to Apr. 12, 2007.

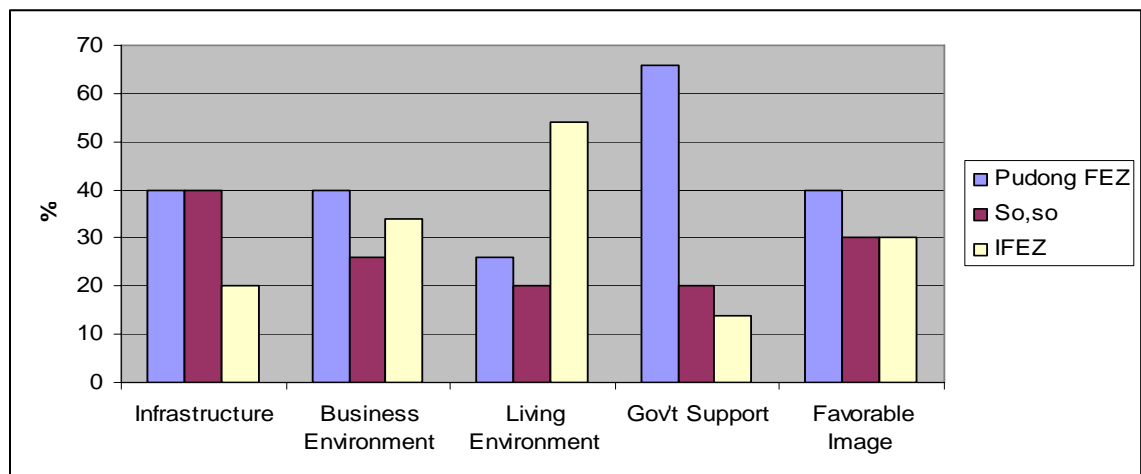
The survey is divided into 3 Parts. The first is a comparison of investment environments between Pudong FEZ and IFEZ, the second regarding obstacles to investment in IFEZ, and the third regarding ways to promote FDI in IFEZ. Each part is examined in terms of three categories: Infrastructure, Business environment, Living environment.

2. Analysis

Investment environment between IFEZ and Pudong FEZ

Before comparing investment environments, I found that 53% of the respondents were familiar with Pudong, China (4 very familiar with Pudong, 4 just familiar) and 30% of the respondents responded “So, so” Only 13% of the respondents were not familiar with Pudong, China. That might be because almost all foreign companies consider Pudong as an alternative investment region. Also, my guess is that a lot of foreign investors are interested in Pudong FEZ because the success story of Pudong FEZ was heavily covered by a lot of newspapers in Korea.

Figure 10 Comparisons of Investment Environment between Pudong FEZ and IFEZ



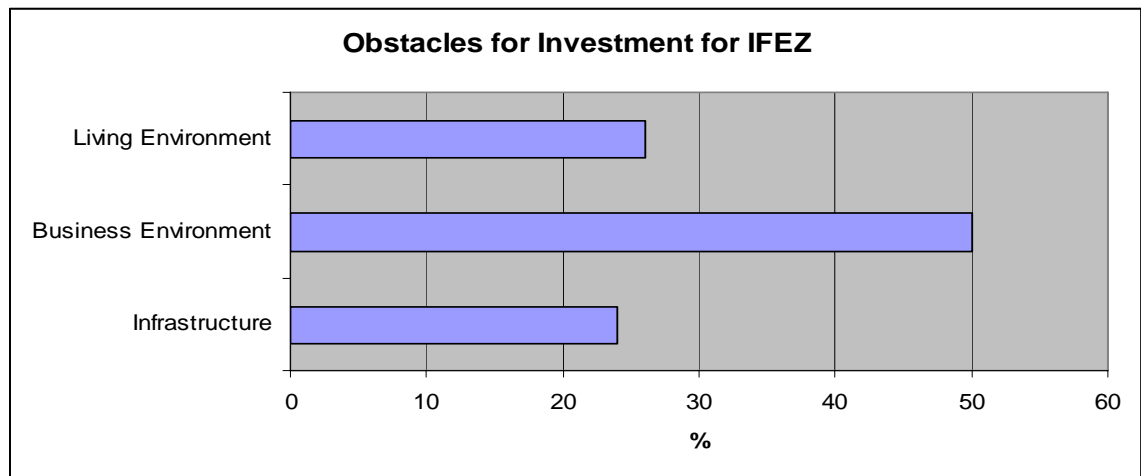
In regards to the comparison of investment environments, respondents showed a more positive attitude toward Pudong FEZ than IFEZ in all areas except living environment. Especially, respondents were not satisfied with the level of government support for IFEZ. This might be concerned with investment incentives which will be discussed in the next part.

3. Obstacles to Investment in IFEZ

(1) Overall condition

Infrastructure, business environment, and living environments are compared in this part. Respondents were not satisfied with the business environment (50%), living environment (26%), or Infrastructure (24%). These results are because of high labor costs and expensive land prices in Incheon.

Figure 11 Obstacles for investment for IFEZ

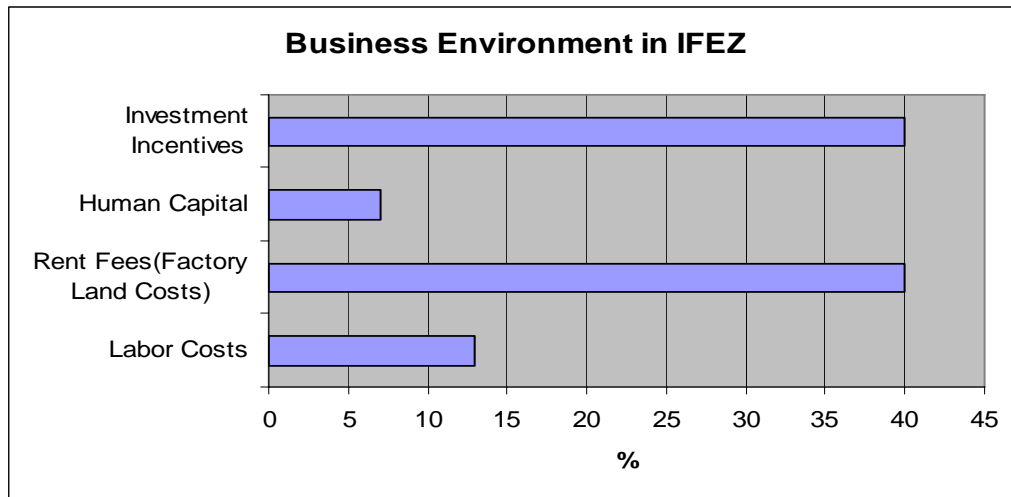


(2) Business Environment

Investment incentives and rents fee were the worst factors according to respondents. About 40% replied that investment incentives are not good and factory land costs are too high. In addition to that, labor costs and human capital were mentioned as main obstacles to investment for IFEZ. As previously mentioned (comparison of major features between Pudong FEZ and IFEZ), average labor costs in Incheon are about seven times higher than those of Shanghai. Moreover, factory site cost is 3.55 times higher in Incheon. The following survey responses regarding business environment shows the

above mentioned high cost problems. So, it is necessary for the IFEZ Authority and the central government of Korea to consider investment incentives equaling those of Pudong FEZ. As mentioned above (Part 2), Pudong FEZ has a 15% corporate tax for foreign companies but IFEZ has a 25% corporate tax. In addition to that, Pudong FEZ allows the banking industry to enjoy tax holidays, whereas IFEZ does not have that kind of tax holidays for the banking industry.

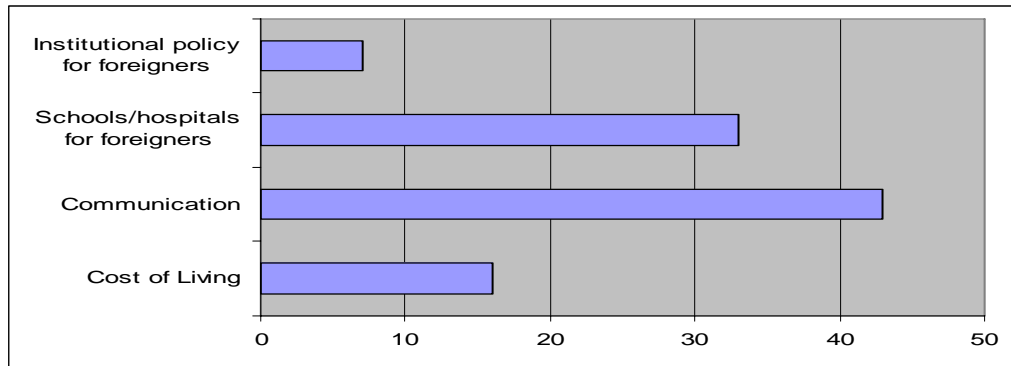
Figure 12 Business Environment in IFEZ



(3) Living Environment

In regards to living environment, respondents voiced a difficulty regarding communication in English. As previously stated (part 2), Korea has not shown good skills in English communication, ranking 111th on the TOEFL of 147 countries in the world. I think that Korean universities need to become more responsible in teaching English communication because about 80% of high school graduates go to college in Korea. Also, schools and hospitals for foreigners should be built as soon as possible. So far, there are no foreigner-oriented schools and hospitals in IFEZ.

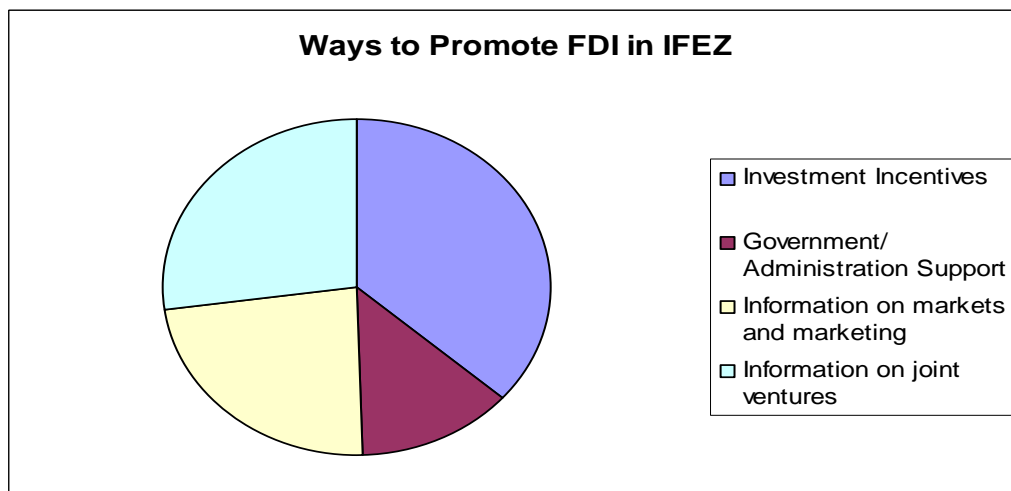
Figure 13 Obstacles for Investment for IFEZ



(4) Ways to promote FDI in IFEZ

Respondents want to have more investment incentives and need to get information on market and joint ventures. (Table III-21)

Figure 14 Ways to Promote FDI in IFEZ



To be sure, respondents are very interested in investment incentives. In my view, this is because almost all people regard FEZ as a special area whose taxation and economic restrictions are less restrictive. Moreover, many foreign investors are interested in information on joint ventures. This is because foreign investors are afraid of risk in investment and prefer to share the risks in business in IFEZ. So, it is necessary for the

IFEZ Authority and central government to make a promotion policy to facilitate a joint venture system in IFEZ.

Summary

Pudong FEZ is regarded as a success model in attracting 23.7 billion USD in FDI in 2004. Pudong FEZ's success is due to well-organized planning, cooperation between central and local governments in making a new system including strong incentives, deregulations and an abundance of cheap labor with a huge market. When it comes to a comparison of major features between Pudong FEZ and IFEZ, Pudong FEZ has strong advantages in seaport of infrastructure. Also, in regards to business environment, Pudong FEZ has more hi-tech oriented industry with lower labor cost and stronger tax incentives compared with IFEZ. However, IFEZ has good information technology and institutional quality compared with Pudong FEZ in business environment. In regards to the living environment comparison, IFEZ has a long way to go in terms of cost of living, communication, and schools/hospitals for foreigners compared to Pudong FEZ. Finally, through e-mail and phone interviews with 15 foreign investors', I found that IFEZ has to make an effort to better the business environment with things like investment incentives, and a joint venture system. So, on the basis of my results of comparison for the major features between Pudong FEZ and IFEZ, I would like to create a development policy for improving infrastructure, business environment and living environment in IFEZ in next chapter.

IV. Conclusion

Lessons Learned from Experiences with Pudong FEZ

About 16 years have passed since Pudong FEZ opened to attract FDI in China. In 2004, the actual arrival of FDI amounted to 23.7 billion USD, as well as 65 multinational companies making their headquarters in Pudong FEZ. However, according to the IFEZ Authority in 2007, the contracted FDI reaches 1,500 million USD with 34 contracts. (Accumulations from 2003 to 2007) Moreover, it is not certain how much contracted FDI will result in actual FDI and there are no multinational company headquarters in IFEZ. The IFEZ has a long way to go. However, it is just 4 years since IFEZ opened to attract FDI and become a business hub of Northeast Asia. A new governing system to develop IFEZ is ready and a lot of construction concerned with IFEZ infrastructure is under way. Here, I would like to answer my research questions regarding how to develop IFEZ in terms of three categories: Infrastructure, Business environment and Living environment.

1. Infrastructure

During stage two, almost all infrastructure of Pudong FEZ was made. Between 1990 and 1995 nearly 2.8 billion USD was invested in transportation links between Pudong and Puxi, including two bridges and several less high profile projects in telecommunications, water and gas systems and electricity supply (chapter 3). The Shanghai Municipal Government concentrated on building bridges and roads at that time, focusing later on attracting FDI. Here, it is noteworthy that fully two-thirds of all fixed asset investment has come from domestic sources (chapter 3). The lesson for IFEZ is to

concentrate first on the development of infrastructure via domestic sources and later to focus on attracting FDI, because infrastructure is a necessity for the IFEZ to survive for itself. According to survey results, 24 % of all respondents were not satisfied with the IFEZ infrastructure. The roads were specified as a serious problem due to traffic jams. However, they expect that the 2nd bridge between Songdo and Yeongjong in IFEZ which is under construction will help to dramatically reduce traffic costs. Also, my guess is that the 2nd bridge between Songdo and Yeongjong would contribute to the development of a logistics industry in IFEZ. IFEZ has Incheon International Airport which is a world-class logistics hub. In 2003, it was the world' third largest cargo hub, behind Hong Kong and Tokyo Narita, handling over 1.84 million tons of cargo.(chapter 3). It would be a great asset for IFEZ to develop a logistics hub. IFEZ needs to make the best possible use of Incheon International Airport by developing a logistics industry. At the same time, Incheon seaport is planning to enlarge and Songdo seaport will be opened in 2012, which would keep up with Shanghai's port.

2. Business Environment

Through the survey, respondents pointed out that the most serious obstacles to investment in IFEZ are in the business environment. (Chapter 3) When comparing costs of doing business between the two regions, it shows that IFEZ is weaker in investment incentives and higher in cost. Average labor costs in Incheon are about seven times higher than those of Shanghai. Moreover, factory site cost is 3.5 times higher in Incheon. (Chapter 3) In addition to that, Pudong FEZ has a 15% corporate tax for foreign companies but IFEZ has a 25% corporate tax. Furthermore, Pudong FEZ allows the

banking industry to enjoy tax holidays, whereas IFEZ does not have tax holidays for the banking industry. So, it is necessary for the IFEZ Authority and the central government of Korea to consider investment incentives equaling those of Pudong FEZ. According to survey results, foreign investors regard the IFEZ as an inauspicious area for business due to its low level of investment incentives. I suggest that in order to attract more FDI for IFEZ, IFEZ needs to provide more cash incentives for investments in Research & Development centers, logistics centers and regional headquarters for multinational companies. So, a more aggressive policy regarding employee grants would be helpful in attracting FDI in IFEZ, as well as in reducing labor costs. Forty percent of all respondents to the survey were interested in joint venture business. This is because foreign investors are afraid of risk in investment and prefer to share the risks of business in IFEZ, so the IFEZ Authority needs to consider how to promote a joint venture system. I think that it is necessary for the IFEZ Authority to provide a variety of domestic business companies' information for foreign investors in order to promote joint venture in IFEZ. At the same time, it is necessary for IFEZ to make use of its strong assets, such as advanced information technology system. Korea ranks 6th in the world with 65% internet penetration (Incheon is 72%) and ranks 1st in the world with a high-speed internet subscription rate of 23.4 %.(Chapter 3) Also, Korea has a better system in institutional quality and openness than China. As well, IFEZ needs to use its strong points to guarantee property rights which are essential for business.

3. Living Environment

In regards to living environment in Pudong FEZ, I found that Shanghai Pudong FEZ already has 30 foreign-oriented general hospitals, but IFEZ is planning to have foreign-oriented hospitals in 2009. I think that foreign-oriented hospitals in IFEZ will play an important role in making IFEZ a business hub in Northeast Asia because the medical industry has a great effect on national economy. If advanced foreign medical system is introduced in IFEZ, it will be a good opportunity to strengthen the Korean medical industry in the area of bio industry. So, IFEZ needs to consider a development plan that will create an opportunity to develop the Korean medical industry through foreign hospitals. Also, it is noteworthy that Shanghai Pudong FEZ has 25 international schools from elementary to high school (Chapter 3), and the IFEZ Authority is planning to build 5 international schools in IFEZ. According to the Ministry of Education of Korea in 2004, there are about 55,000 Korean students studying in the U.S. and 1.55 billion USD were used on overseas education. If the IFEZ Authority is successful in introducing advanced foreign schools in IFEZ, IFEZ could play an important role in reducing overseas education costs for Koreans. So, it is necessary for the IFEZ Authority to consider foreign schools in terms of creating good economic results as well as providing good conditions for foreign businessmen. At the same time, respondents of the survey voiced a difficulty regarding communication in English. As previously stated (Chapter 3), Korea has not demonstrated good skills in English communication, ranking 111th out of 147 countries in the world on the TOEFL. I think that Korean universities need to become more responsible about teaching English communication because about 80% of high school graduates go to college in Korea.

Implications for IFEZ, Korea

1. Strong Support to Develop IFEZ from Central Government: Selection and Concentration Policy

The Chinese central government has been encouraging Pudong to take bold steps in reforms, making it an experimental field during the opening-up drive. For instance, in 1997, Pudong became the first place in China where foreign banks were allowed to handle Renminbi, the local currency. (Chapter 3) Such being the case, the Korean central government needs to be more aggressive in its support for the development of IFEZ. For example, sound legal framework is necessary to attract FDI in IFEZ. The Chinese central government has come up with more than 100 laws and regulations in different international languages, concerning lower taxes and bonded zones or other areas (Chapter 3). The central government of Korea needs to follow a ‘Selection and Concentration Policy’ like that of the Chinese Government. There are 3 FEZs in Korea ‘ Inchoen, Jinhae and Busan’. Except for IFEZ, the areas are far behind in terms of infrastructure, business environment and market, and the national budget to support FEZs projects is limited. So, it is worthwhile to consider what the priority is for developing FEZs in Korea. If IFEZ has the possibility of success in the near future, more budget and institutional support are necessary because IFEZ would be a good model for development of FEZs in Korea.

2. One Governing System to Develop IFEZ

As mentioned in chapter 2, there has been a dispute over the formation of a new governing body for IFEZ. Despite escalating concerns from foreign investors of the free economic zone, the government and free economic zone authorities have dragged out the battle over forming a new governing body for the zones. Here, I would like to look at the Pudong FEZ model. The central government of China is in charge of institutional support and Shanghai's Municipal Government has led the development of Pudong FEZ.

Shanghai's Municipal Government established a Pudong FEZ Authority to deal with all the projects, including FDI attractions. It was a great success. So, I suggest that more administrative power needs to be in the hands of the IFEZ Authority, especially regarding FDI attraction. At this point, the IFEZ Authority has a lot of projects underway, and foreign investors are contacting the IFEZ Authority for consultations. Moreover, IFEZ covers one fifth of Incheon's Metropolitan area, which causes the Incheon Metropolitan Government to worry about keeping the city's development balanced. It would add more confusion to foreign investors if the central government tried to change the role of the IFEZ Authority.

3. Deregulation and One-Stop Service

According to the survey results, 30% of investors mentioned 'deregulation' of the business. One of the foreign investors complained that tons of paper documents are necessary to build a factory in IFEZ. Also, an investor complained that he did not know the difference between IFEZ and non-IFEZ areas regarding labor regulations. He asserted that militant labor unions would stage a long-term strike in IFEZ if the Korean

government changed the law concerning labor flexibility. I suggest that all the labor regulations need to be examined fully in order to keep up with the global standard. Then, the government should share the view that deregulation is needed to move our economy to the next level. In addition, labor unions should abide by the law and society norms and maintain mutually beneficial labor-management relationship.

At the same time, other investors are worried that it would take 5-6 months to get permission to do business in IFEZ. I suggest that a one-stop would promote business. All the department members of the Administration should gather to allow businesses to work with a one-stop service in IFEZ. It would facilitate businesses in IFEZ and make a big difference compare to non-IFEZ areas.

In conclusion, the Pudong FEZ model shows that strong infrastructures are necessary in order to attract FDI for IFEZ, and a variety of investment incentives are required to attract more FDI with deregulation on economic activities. Also, more foreign-oriented hospitals and schools are required for the IFEZ to be a foreigner-oriented business hub of Northeast Asia. Finally, strong support from the central government to develop IFEZ from central government is urgent, as well as an effective one-governing system.

Bibliography

- Ahn, Choong Yang (2004). *Geographic coverage of northeast Asia*. Korea Institute for International Economic Policy.
- Anuradha Dayal-Gulati, Angela Y. Lee (2004). *Kellogg on China: strategies for success*. Northwestern University Press
- Andrew M. Marton, Wei Wu (2003). *A case study of the development of the Shanghai Pudong New Area*. International Business Journal Vol.2, Issue1.
- Douglas H. Brooks, Hal Hill Basingstoke (2004). *Managing FDI in a globalizing economy: Asian experiences*. New York : Palgrave Macmillan Publishers.
- Guangwen Meng (2003). *The Theory and Practice of Free Economic Zones : A Case Study of Tianjin/People's Republic of China*. Peter Lang Press.
- Incheon Development Institute (2004), *Backgrounds of industry restructuring in Incheon and its managing strategy*. Retrieved March 2007 from <http://w1.idi.re.kr>
- Incheon Development Research Center (2004). *Population of Korea, Seoul, Incheon, Gyeonggi and Capital Region*. Retrieved March 2007 from <http://incheon.go.kr>
- Incheon Free Economic Zone Authority (2007). *Planned population and development strategy*. Retrieved March 2007 from <http://ifez.go.kr>
- Incheon International Airport (2007). *3.5 hour flight time distance from Incheon*. Retrieved March 2007. from <http://www.airport.or.kr/eng/freezone/iia-02.jsp>
- Incheon Metropolitan City Government (2005) *The current status of Incheon Free Economic Zone Project and attracting FDI investment plan*. Retrieved March 2007 from <http://www.fez.go.kr/bbs/index.php?cmd=view&dbt=kprm&code=22&page=2&sel=&key=&cate=&rgn=&term=>
- International Institute for Management Development (2004), *World Competitiveness Rankings*. Retrieved March 2007 from <http://www.imd.ch/index.cfm?bhcp=1>
- Jeon, Yeongnam (2005). *Incheon International Airport Development Plan*. Korean Institute for International Economic Policy.

- Kim, Kihwan(2004). *Free Economic Zones in Korea*. Korea Institute for Industrial Economics & Trade.
- Kim, Yeongjin(2006), *Shanghai Pudong new area development strategy*, Invest Korea Agency
- Korea Development Institute (2004). *The Outcome of a national competitiveness analysis of Korea and its political meaning – basis on IMD and WEF*, Retrieved March 2007 http://www.kdi.re.kr/data/download/attach/7044_cu20030724-5.pdf
- Korean Development Institute(2003). *National competitiveness rankings of 6 Asian countries2001-2003*. Retrieved March 2007 from <http://www.KDI.go.kr>
- Korea Trade Promotion Corporation (2003). *Comparative Studies Between China and Korea*. Korea Trade Journal Vol.2 Issue 3
- Ministry of Construction and Traffic of Korea(2004). *Airport comparisons between Incheon International Airport and Pudong International Airport*. Retrieved March 2007 from <http://www.moct.go.kr/>
- Ministry of Information and Technology of Korea(2005). *Internet infrastructure in Korea*. Retrieved March 2007 from <http://www.imd.ch/index.cfm?bhcp=1>
- Pudong FEZ Government (2005). *Foreign direct investment*. Retrieved March 2007 from <http://english.pudong.gov.cn/index.jsp>
- Pudong FEZ Government (2007) *Pudong History on economic development* .Retrieved March 2007 from http://www.pudong.gov.cn/english/common/content.jsp?sj_id=19179&ct_id=45757
- Shanghai Municipal Government (2005). *Shanghai vs Pudong FEZ(2004)*. Retrieved April 2007 from <http://www.shanghai.gov.cn/shanghai/node8059/BasicFacts/index.html>
- Yeom, min(2004). *Korean economy at the crossroads*. Invest Korea Agency
- World Trade Organization(2003). *Leading exporters and importers in world trade in merchandise and commercial service*. Retrieved March 2007. from <http://wto.org>