

The Development of Hong Kong as an International Financial Center and the Prospect of Constructing Shanghai as the Next One

Based on a Comparative Functional Study

Jie An

Thesis Advisor: Gregory Corcos

Master in International Business

This thesis was written as a part of the master program at NHH. Neither the institution, the advisor, nor the censors are - through the approval of this thesis - responsible for neither the theories and methods used, nor results and conclusions drawn in this work.

Abstract

Shanghai is a building international financial center. And, Hong Kong as a part of China has been the one of the most important international financial centers for many years. At present, it is rare to find the literatures which compare the two cities comprehensively, especially from the financial system's functional aspects. Therefore, this thesis would be committed to this point, which aims to conclude experiences from Hong Kong's success and provide suggestions to the construction of Shanghai.

Key Words: International financial centers, Financial System Functions, Hong Kong, Shanghai

Table of contents

1 Introduction	5
1.1 Background	5
1.2 Purpose and Research Questions	6
1.3 Methodology	6
1.4 Structure	7
2 Theoretical Framework	9
2.1 Theory of International Financial Center: Definitions and Functions	9
2.2 The Location of Economic Activities	11
2.2.1 First and Second Nature, Trade Costs, Agglomeration and Dispersio	n Force, and
the Core-Periphery Model	11
2.2.2 Location Theory	13
2.3 The Location of Financial Activities	15
2.4 The Decentering of the Global Firms	16
3 Social Environments	19
3.1 Hong Kong	19
3.1.1 Geography	19
3.1.2 The Political and Economic System	20
3.2 Shanghai	21
3.2.1 Geography	21
3.2.2 The Political and Economic System	22
4 Hong Kong and Shanghai: Development and Financial Systems	25
4.1 The Causes for the formalization of International Financial Centers	25
4.2 Evolution and Transformation	25
4.2.1 Hong Kong	25
4.2.2 Shanghai	29
4.3 Financial Systems	32
4.3.1 Hong Kong	33
4.3.2 Shanghai	35
5 A Comparative Functional Perspective: Hong Kong and Shanghai	38
5.1 Financial Markets in Hong Kong and Shanghai	39
5.2 Transferring Economic Resources	43
5.3 Managing Risks	49
5.4 Clearing and Settling Payments	54
5.5 Pooling of Resources and Subdividing of Shares	56
6 Conclusions	58
Appendix I – Foreign Exchange Market Turnover	60
Appendix II – Derivatives Market Activity	63
Bibliographies	65
Websites	65
Database	66
Essays and Reports	67
Books	69

List of Tables

Table 2.1 Top 10 contributors to the world GDP	11
Table 4.1 The Global Financial Center Index 6	29
Table 4.2 Employments and Value Added of the Financial Sector Services	34
Table 5.1 Financial Markets in Hong Kong and Shanghai	39
Table 5.2 Hong Kong Monetary Statistics	44
Table 5.3 Deposits and Loans of Domestic and Foreign Financial Institutions	46
Table 5.4 Derivative Markets 2007-2009.	52
Table 5.5 Market Value and Trading Value for Unit Trusts and Mutual Funds	57
List of Figures	
Figure 2.1 The Changing Shape of the Global Firm	16
Figure 2.2 Decentering Global Firms	17
Figure 3.1 Hong Kong in the Asia Pacific Region	19
Figure 3.2 Shanghai and Cities and Seas Around	22
Figure 4.1 The Flow of Funds	33
List of Graphs	
Graph 4.1 Percentage Contribution of the Financial Services Sector to GDP	34

1 Introduction

1.1 Background

Since late 1960s, Hong Kong has been speedy developing to be the next largest international financial center after Tokyo in Asian area. In 1978, the Chinese Communist Party put forward policy "Internal Reform and Opening-Up" which was the first basic national policy of opening-up since the founding of the People's Republic of China. This strategic decision changed the situation of China Mainland's long history of closure to the outside, which greatly improved the living standards of people, promoted the country's international image, and then, drove it to enter a period of rapid economic growth. At the same time, Hong Kong was considered as the portal of China Mainland by the foreign investors, especially after 1997. Therefore, benefiting both from the eastern and western cultures, and its high degree of economic freedom, Hong Kong becomes one of the premier international financial centers in the world.

Similar to Hong Kong, Shanghai is also a relatively young city in China, but extremely important. After the first Opium War, Shanghai became one of the five bunds as foreign trading ports, which helped modern Shanghai quickly became the most prosperous economic, financial, trade and shipping center in the Far East. Ever since a long time ago, Shanghai has been the core city of light manufacturing in China. And because of the special international environment and the geography advantages, numerous foreigners from every corner of the world swarmed into Shanghai in last century, which made Shanghai become the "Paradise of Speculators" eventually. However, through the 1930s and 1940s, the political and economical chaos in China drove Shanghai out of its dominant position and Hong Kong soon replaced it as the new financial center.

On 29th April, 2009, The Views of State Council on Promoting Shanghai to Speed up

the Development of Modern Service Industry and Advanced Manufacture, and Building it as the International Financial and Shipping Center was announced by the Chinese government officially¹. After reforming and opening-up for 30 years, Shanghai has made significant achievements in economic and social development, and now been in a crucial period of transition. In response to the international financial crisis situation, this decision could make Shanghai better serve the Yangtze River Delta, Yangtze River area, and the entire country.

1.2 Purpose and Research Questions

At present, the task of building Shanghai as the "Double Centers" has just taken the initial step. Many issues are waiting for researching and proving. This thesis seeks to empirically research the development of Hong Kong as an international financial center and the construction of Shanghai as the next one, which is supposed to be done based on a comparative study between the two cities. The purpose is first to conclude the experience from the success of Hong Kong, and of course it cannot be simply copied by Shanghai, but significant advices are supposed to emerge, which is the second object of this thesis.

The research questions of this thesis are as follows:

- 1. What are the necessary conditions for Hong Kong to develop as an international financial center?
- 2. How can Shanghai develop as an international financial center?
- 3. What is the interaction between the two cities?

1.3 Methodology

For the research method, basically it is a combination of both the quantitative and the

6

¹ http://english.gov.cn/2009-04/29/content 1300425.htm.

qualitative. I would try to collect data from different sources and get a good understanding of the topic through qualitative study.

There are different types of research strategies, the most common of which are: experiment, survey, case study, action research, grounded theory, ethnography, and archival research (Saunders et al, 2007). I will use experiment in this thesis. And because we can also take Hong Kong and Shanghai as two cases, it could be viewed as case study as well.

The data in this thesis is based on the public economic and financial data. The main sources include official statistical websites in related areas (e.g. National Bureau of Statistics of China, Hong Kong SAR Census and Statistics Department, Bureau of Statistics of Shanghai......), and the websites of international and regional researching organizations (e.g. HKMA, IMF, WB......).

In this thesis, the core method is comparative study which is based on the conceptual framework promoted by *The Global Financial System* (Crane & others, 1995) of Harvard Business School. The key of this framework is it focuses on financial functions rather than institutions, because financial institutions are actually different from areas to areas. There are a variety of reasons could explain this phenomenon, which include the *differences in size*, *complexity*, *and available technology*, *as well as differences in political*, *cultural*, *and historical backgrounds* (Merton & Bodie, 1995)².

1.4 Structure

Introduction part includes the purpose and structure of this thesis, and the brief history, economic environment and political system in Hong Kong and Shanghai. This is the foundation of understanding the present situations of the two cities. Section two sets

² Crane, Dwight B. & others (eds) (1995) *The Global Financial System: A Functional Perspective*. Boston: Harvard Business School Press.

out the theoretical framework which mainly refers to the international financial centralization and decentralization, the economic and financial geography, and the impact of new technology and financial crisis. Then, to answer the research questions in details, section three provides the concrete description of history and social environment both in Hong Kong and Shanghai. Section four examines the situation, emergence and development of Hong Kong, and Shanghai as international financial centers. In this part, I will also describe their financial systems. And section five focuses on the financial functional comparisons between the two cities. The final section concludes the significant suggestions to constructing Shanghai as the next international financial center in China.

2 Theoretical Framework

2.1 Theory of International Financial Center: Definitions and

Functions

In the long history of human society, lots of metropolises emerged by virtue of economic prosperity and became the centers in the near region, or even the whole world, like Chang'an, the only starting point of the famous Silk Road which connected China to Europe, in Han Dynasty (BC 202–AD 9) and Tang Dynasty (AD 618–907), Rome from AD 100 to AD 200, London from 1801 to the beginning of the 20th century, and New York in the recent more than one century. In their time, they were not only the financial centers, but also the cultural centers, which exhibited the splendid wisdom of humanity, and deeply impacted the future generations.

Except from those great cities, in the modern world (18th and 19th centuries), because of the gradually increasing importance of finance factory in the economic environment in a nation, more and more cities had been titled as "International Financial Center", including Berlin, Frankfurt, Hamburg, Amsterdam, Paris, Genoa, Florence, Milan, Turin, Venice, Zurich, Philadelphia, and Shanghai, all of which emerged as leading centers of finance and commerce (Kaufman, 2000; Fratianni, 2007; Jarvis, 2009). So the studies of international financial centers rose markedly at that moment. But in the following years of WWII, this sort of studies fell down, which possibly owed to the development of regional economy, money and capital markets. However, in the late 1960's, because of the tremendous speed of Asian countries' economic development, the revival of these studies finally came and most of them focused on Tokyo, Singapore and Hong Kong (Reed, 1980).

It is hard to define a financial center. Sometimes it is even generally and simply viewed as the stock market. As the distinguished researcher in this field, Reed (1980) described two different definitions of financial centers. The traditional thought states

that a centralized location could offer efficiencies which accredits to the functions of economies-of-scale including (1) efficient and low-threshold access to the knowledge and service of complementary and competitive institutions; (2) clearing and exchange process for checks, drafts and stock certificates; (3) availability of larger and cheaper amounts of capital for borrowers and greater liquidity for lenders; and (4) personal expertise for those experienced in international management matters. And Kindleberger (1974) summarized the attributes further as financial centers are needed not only to balance through timing the savings and investments of individual entrepreneurs and to transfer financial capital from savers to investors, but also to affect payments and to transfer savings between places.

The present thought suggests that the international financial centers evolve from national financial centers, or in another word, are mere extensions of national financial centers. That means, the same factors which contribute to the development of national financial centers will eventually make these locations be international. And out of question, the speed of international development and the level of internationalization would count on the situation of the readily that national financial centers broaden and refine their financial infrastructure (Reed, 1980).

Based on the studies of famous Chinese economist Zeng, Kanglin (2003), there are five main roles of international financial centers in the world economy: (1) Financing, which is mainly reflected in two ways: first they could participate actively in the international inter-bank borrowing/lending and foreign exchange transactions; and second, issue bonds and stocks. (2) Investment, which is mainly reflected that they could finance capital through the financial institutions in the area and utilize the capital to invest; (3) Transaction, which is mainly reflected that the activity of the transaction of financial products; (4) Innovation, which is mainly reflected that they could release new financial products continually; and (5) Composite Service, which is mainly reflected as the good infrastructure and service. In all, international financial centers should promote economic development and social progress eventually.

2.2 The Location of Economic Activities

Only when the economy in an area has achieved the relatively mature level, the intense importance of the financial sector could be reflected. Both Hong Kong and Shanghai's economy has been thriving for a long time, which is the solid foundation of building the two cities as the international financial centers nowadays. From the observations of the researchers (Venables, 2005), economic activity is concentrated in some regions of the world. In Table 2.1, we can see that in 2009, the Top 10 contributors to the world GDP (58,133,309 millions of US dollars) account 67 % in the whole volume, and they are mainly from three classic and huge flourish economic regions: North America, Europe, China and Japan. Meanwhile, both India and Brazil are from BRICs (of course China is also in it), which would hopefully displace G7 and become the biggest economy on the earth in the near future. In this part, I will briefly describe three schools of Location Theory as the background.

Table 2.1 Top 10 contributors to the world GDP

Ranking	Economy	(millions of US dollars)
1	United States	14,256,300
2	Japan	5,067,526
3	China	4,909,280
4	Germany	3,346,702
5	France	2,649,390
6	United Kingdom	2,174,530
7	Italy	2,112,780
8	Brazil	1,571,979
9	Spain	1,460,250
10	Canada	1,336,067

Source: World Development Indicators database, World Bank, 1 July 2010.

2.2.1 First and Second Nature, Trade Costs, Agglomeration and Dispersion Force, and the Core-Periphery Model

Some conceptions are closely related to the location theories. First of all, "First Nature" refers to purely natural, physical advantages, like natural resources, and "Second Nature" focuses on features of economy, such as market size and

input-output linkages.

Secondly, "Trade Costs" is an extreme important factor of impacting the trading form. It imposes negative influence on the process of transferring goods, capital, labour and knowledge. And the distance between the trading points will increase trade cost, thus affect the trading form indirectly eventually. According to Adam Smith, "Free Trade" refers to a situation where a government does not attempt to influence through quotas or duties what its citizens can buy from another country, or what they can produce and sell to another country (Hill, 2009). Both quotas and duties would raise trade cost. Basically, Hong Kong's market is at a high level of freedom, and its low tax policy facilitates it to enjoy real "Free Trade". Trade costs between Hong Kong and its trading partners are relatively low compared to it between other regions, and which is one of the reasons to explain Hong Kong's flourishing economy.

The third one is about "Agglomeration force" and "Dispersion Force". In researching New Economic Geography, a new thought of "Location" comes up: under the assumption that all factors are mobile, firms tend to cluster together, and the similar or even identical regions could be very different (Ottaviano, 1997). Suppose there are two regions. Agglomeration forces could mainly be explained by two linkages: (1) Demand Linkage. Assume A and B are identical. At first, a firm chooses to locate in A, then it hires more workers in this region, which would attract more new entrants because the increase of final demand. (2) Input-Output Linkage. Now the economies-of-scale of A is larger than B, so the trade cost is lower there. Then the increasing number of new entrants would enlarge the production market in A, which will make the product cost decrease and thus A would be more attractive. Opposite to agglomeration force is the "Dispersion Force". There are three causes for this phenomenon: (1) Increased Competition. Because lots of firms choose to locate in A following the first entrant, the competition in A would be fiercer and the prices of goods should decrease. So the profits for these firms would decrease too, and B will be more attractive. (2) Labour Mobility Costs. As the same based on that the

economies-of-scale of A is larger than B, the wage level in A should be higher than it in B, which is not conductive to the firms in A. On the other hand, we should notice that because all the factors are mobile, the workers in B could move to A freely, which would inhibit the ascendant trend of the wage level in A to a certain. (3) Housing Prices. This is essentially as same as the labour mobility cost (Venables, 2005).

At last, Core-Periphery Model could also explain the manufacturing firms' location choices between two regions. Still consider there are two identical regions A and B, and the mobility of capital and labour is perfect. So the capitals would flow to the region where profits are higher and also the workers would migrate to the region where wages are higher. And the profits and wages would achieve to an equilibrium between A and B eventually. A firm chooses one region to locate would bring three effects to the followers. (1) Competition Effect (negative). Competition would be more intense as the growing numbers of firms in a region, and then individual demand and marginal revenue would decline. (2) Demand Linkage (positive). The increasing number of workers in a region would lead to the increasing individual demand and marginal revenue. (3) Cost-of-Living Effect (positive). Fierce competition in a region would reduce the goods prices there, so the cost-of-living in this region will go down. Thus the nominal wages drop (Venables, 2005).

2.2.2 Location Theory

According to the summary of Brulhart (1998), first location theory is Neo-Classical Theory (NCT) which states that "First Nature" determines the location of a firm. The assumptions of this theory include zero trade cost, perfect competition, homogeneous products and non-increasing returns to scale. Under this circumstance, economic activity is concentrated or spread according to the features of physical factors.

Second is New Trade Theory (NTT). The new trade theory began to emerge in 1970s. The trade theory's development began in England in mid-16th century. The first theory of international trade is Mercantilism, which holds that *gold and silver are the*

mainstays of national wealth and essential to vigorous commerce (Hill, 2009). And a country should keep the goods exported more than those imported all the time to maintain a profits surplus. The most notable disadvantage of mercantilism is that it takes trade as a zero-sum game, which is not consistent with the realistic situation. So 1776, in his famous *The Wealth of Nations*, Adam Smith took the lead to refute this view and stated that if a country could produce a product more efficiently than other countries, it has an "Absolute Advantage". And according to Adam Smith, countries should specialize in producing the goods with absolute advantage and trade them for the goods produced by other countries. Then time comes to 1817, David Ricardo developed Adam Smith's theory further. He put forward "Comparative Advantage" in his book Principles of Political Economy, which made sense for a country to specialize and export the goods it could produce more efficiently, and import those products it produce less efficiently (compared to itself) from other countries. Both Adam Smith and David Ricardo's theories prove that trade is a positive-sum game and all participating countries could benefit from it if they follow the rules. At the beginning of 20th century, Heckscher-Ohlin Theory explained comparative advantage by introducing "Factor Endowments". The countries would export the goods produced by the abundant factors locally, and import the ones made by the scarce factors. Raymond Vernon's product Life-Cycle Theory was proposed in the mid-1960s. It clearly pictured the spread of economic activities from the most developed country (e.g. United States) to other advanced countries (e.g. European countries), and at last to the developing countries (e.g. China) through analyzing the life circle of a product. Then, the New Trade Theory in 1970s stressed on economics-of-scale which could increase the variety of goods available to consumers and decrease the average cost of those goods so determine the location of firms. In 1990, Michael Porter chose four factors (Factor Endowments, Demand Conditions, Relating and Supporting Industries, and Firm Strategy, Structure and Rivalry) which could determine whether a country will succeed in international competition or not.

And the third one is New Economic Geography. Here location becomes totally

endogenous, and opposite to NCT, Second Nature determines everything (Brulhart, 1998). These characteristics would lead initial disturbance to new locational equilibrium at last.

2.3 The Location of Financial Activities

According to the study of Blancard & Tadjeddine (2009), the location of financial activities is characterized by huge sums of *inertia* traditionally. However, *the* prosperity in new information and communication technologies, the globalization of economics, and the 2007-2008 global financial crisis has already notably modified the financial geography recently.

The new information and communication technology changed the financial geography. There are three externalities of them. First, the financial employees could work anywhere in the world because of electronic exchange, thus brought about the fall of transaction costs of financial activities. Actually, lower transaction costs could lead to two completely different effects on financial activities. With the decreasing transaction costs, the influences of other factors which determine the location of financial activities would be strengthen. The first group facilitates to the dispersion of financial activities, such as higher real estate costs and declining profits because of fiercer competition. The second group, on the contrary, is in favor of concentrating financial activities, such as favorable policies, better infrastructures and low production cost. Second, the choices of location of every participant in financial field are dependent on each other. And if the companies in the same field gather together, it is more possible to attract more special suppliers, thus costs would decrease. Meanwhile, the concentration of companies could help to build employment pool, which makes the work force costs decline and also improve the quality of manpower capital. Third, new information and communication technology would contribute to the circulation of information. The public information could especially be reached with low cost. So companies do not need to keep close to the stock market, but they

still need to cluster to share the private information (Blancard & Tadjeddine, 2009). Therefore the three externalities partly explain why the financial centers need get together.

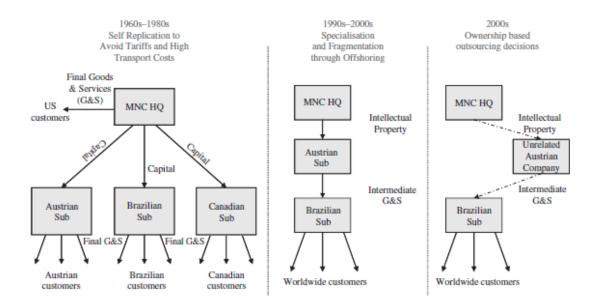
The global financial crisis which was ignited by the United States Sub-Debt Crisis also changed the financial structure of the world. Lots of old financial centers, like London and New York, dispirit. A large number of financial employees lost their jobs in the two historical international financial centers. While many Asian big cities, like Tokyo, Hong Kong and Shanghai, begin to emit radiance again just because they are less impacted by the crisis.

In all, Blancard & Tadjeddine (2009) summarized three features of the transformation of financial activities: the transfer of certain activities to peripheral areas, the delocalization of certain establishments and the expected dispersion of high value-added jobs.

2.4 The Decentering of the Global Firms

Based on the research of Desai in 2009, traditionally, a multinational enterpriser's headquarter would be established in its home country, but with the development of the economic globalization, the locations of their headquarters have not been restricted in a nation's boundary. In Figure 2.1, we can see the changing shape of global firms from 1960s to 2000s.

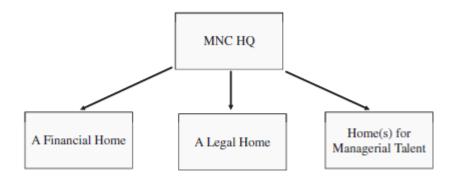
Figure 2.1 The Changing Shape of the Global Firm



Source: Desai, Mihir A. (2009) The Decentering of the Global Firm.

In this figure we see that after 1990s, the choices of locations of the headquarters tends to be more specialized. And before 2000s, a company's national identity can not be changed. However, at present the identity is mutable. The ownership is based on outsourcing decisions. And normally, there are three functions of a corporate headquarter (Figure 2.2).

Figure 2.2 Decentering Global Firms



Source: Desai, Mihir A. (2009) The Decentering of the Global Firm.

There are four main factors which promote to the phenomenon in Figure 2.2 concluded by Desai (2009). At first, the communication technology resolution changed traditional business style thoroughly. Managers no longer need to be located

together from time to time. In contrast, they could work anywhere as they like. Secondly, in current business world, managerial talents are extremely important. Many companies, especially the private ones, tend to splinter the Managerial Talent sector to attract them. Thirdly, many countries compete to be the Financial Home or Legal Home of the major multinational enterprisers to increase potential profits by virtue of formulating preferential tax or legislation policies. The last but not the least is the emergence of international investors and speculators.

3 Social Environments

3.1 Hong Kong

3.1.1 Geography

Hong Kong sits on the south-eastern tip of China Mainland, which is one of the wealthiest areas in China. It is surrounded by the Pearl River Delta and South China Sea³. And such a special location partly leads to the impressively continual prosperity of this city in modern and current world.

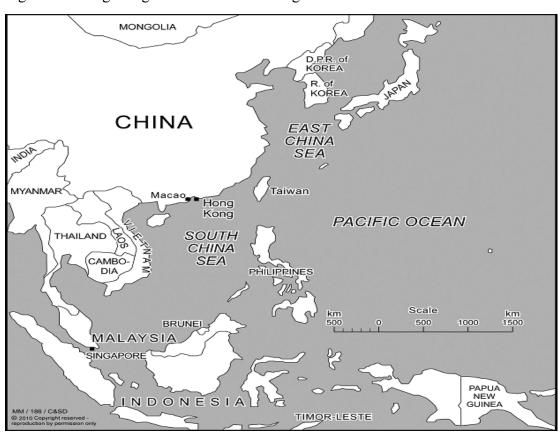


Figure 3.1 Hong Kong in the Asia Pacific Region

Source: Census and Statistics Department (2007) *Geography and Climate, Hong Kong*. The Government of Hong Kong SAR.

The three parts of Hong Kong (Hong Kong Island, Kowloon Peninsula and New

³ Census and Statistics Department (2007) *Geography and Climate, Hong Kong*. The Government of Hong Kong SAR.

Territories) are from three unequal treaties at different periods, which are Nanking Treaty in 1842, Convention of Pecking in 1898 and Convention for the Extension of Hong Kong Territory.

3.1.2 The Political and Economic System

After being the colony of the British, the Governor of Hong Kong who was the authorized agent of the British Family had great powers. The executive council and legislative council are two pillars under the Governor.

On 1st July, 1997, China formally resumed the sovereignty over Hong Kong, which terminated its 150-year-colonial history. Since then, Hong Kong became a special administrative region of China. According to the Sino-British Joint Declaration in 1984, Hong Kong would enjoy a very high degree of autonomy except for defense and foreign affairs. And under Hong Kong's constitutional document "Basic Law", it would have independent politics, economic system, justice and life. The political system became "Separation of the Executive, Legislative and Judicial Powers". But because of the "Chinese Characteristics", the check and balance system was desperately designed as the executive council was with higher powers over the legislative council, which was so-called executive-led government. It should be mentioned that this political system not only retains the effective components in the original one, but also satisfies the practical needs of Hong Kong's reunification with China Mainland. So currently it seems that this is the most suitable political organization to achieve the aim that "Hong Kong people rule Hong Kong, and enjoy a high degree of autonomy".

The most creative policy made by Deng Xiaoping Administration possibly is the one called "One Country, Two Systems", and here the "System" means economic system. This policy said in the premise of "One China", the Mainland would persistently hold the socialist system, while Hong Kong, Macao and Taiwan could retain their original capitalist system. Just because of this adventurous work, Hong Kong could avoid the

turmoil in its economic environment for large numbers of foreign companies and financial intermediates chose to stay thereby the capital flight had been stopped in a certain extent.

Free market economy is the most basic feature of the Hong Kong economy system, and also one of the important factors which bring about the great economic success in this city. Hong Kong has been taken as the freest economy system in the world for 15 consecutive years. The core of free market economy is to achieve the effect allocation of social resources through the self-regulating mechanism of law of value, supply and demand, and competition. The official economic policy in Hong Kong is "Positive Non-Interventionism", and it is famous for its "Laissez-Faire Capitalism". Hong Kong's free market economy is built on its role as a free port. The government directly controls some public departments, and for the important sectors, like trade, commerce, industry, shipping and so on, it does not interfere but allows them to operate themselves, and the market itself dominates their activities. At the same time, Hong Kong government implements low-tax system which attracts a mass of foreign investments. At present, Hong Kong's free market economic system has been gradually mature. The entire market system in Hong Kong enjoys a high degree of freedom, openness and internationalization.

In all, Hong Kong's honest government, good public security, free economic system and the complete rule of law make it a paradise in the eyes both of investors and consumers, which stimulate Hong Kong's development further. Just 100 years passed, Hong Kong successfully evolved from a small fishing village with thousands of people into the cosmopolitan city with the reputation as the "Pearl of the Orient".

3.2 Shanghai

3.2.1 Geography

Shanghai is the largest city in China. It is located on the Yangtze River Delta on

China's eastern coast, and the distances to Beijing and Hong Kong are nearly same. The whole municipality is consisted of a peninsula between the Yangtze and Hangzhou Bay, China's third largest island Chongming, and a number of smaller islands⁴.

Chongming <u>Liuhe</u> JIANGSU T CHINA SEA Luodian <u>Nanxiang</u> Shanghai Qingpu Zhoupu Zhujiajiao Nanhui Songjiang Minghan **Fengxian Zhujing** Zhangyan ZHEJIANG Jinshan NGHA

Figure 3.2 Shanghai and Cities and Seas Around

Source: http://english.dreams-travel.com/chinaguide/shanghai-map.htm

3.2.2 The Political and Economic System

Shanghai's great improvement not only owes much to its geography advantage but also the policy support in the long time. Let's first have a look the political and economic system in Shanghai, which means in the whole China Mainland.

Here the CPC (Communist Party of China)-led multi-party cooperation and political consultation system is the basic political system, which is a socialist political party

-

⁴ http://en.wikipedia.org/wiki/Shanghai#Geography_and_climate.

system with distinct Chinese characteristics. Deng Xiaoping still stressed the leadership of the Chinese Party of Communist, and the party plays an important role in people's lives consecutively.

Therefore, the government intervention in economy is much more intensive in Shanghai than in Hong Kong, especially for Shanghai is the economic and financial center in China Mainland, which means it attracts most attention from the core of the party and government administrations.

After entering the Deng Xiaoping era, the economic system became unique. The theory of "Socialist Market Economy" is the most innovative part in the whole Deng Xiaoping Theory. There are three basic features of it. Firstly, as the aspect of ownership structure, the public ownership should hold the dominant position, while diverse ownership-modes should develop together. In all, any economic forms which are consistent with "Three Benefits" should be used for the socialist service.

Secondly, as the aspect of distribution system, distribution according to work should be the main form and a variety of distribution modes coexist in it. Thirdly, as the aspect of macro-control, because public ownership is considered as the mainstay, the country has a relatively strong material foundation, a solid political foundation and a broad mass base to regulate the market. So people's immediate interests and long-term interests, local interests, and collective interests could be combined, and the strengths of the two instruments (planned economy and market economy) would be exerted at the same time.

Therefore, in Shanghai, like in other cities of China Mainland, state-owned enterprises, state-holding enterprises and collective enterprises are the most important components in business environment. And on the other hand, private enterprises and foreign-funded enterprises are also protected by law So they could also develop

improve people's living standards?

This is an evaluation criterion from Deng Xiaoping Theory. Everything should be judged as: is that benefit to develop socialist productive forces, enhance the overall strength of socialist countries and

prosperously. But in all, compared to Hong Kong, it is harder for Shanghai to obtain foreign direct investment (FDI), which is negative to its development obviously. From an Economist Survey (7 March, 1998, p.114), during the period 1992-1996, as the aspect of the attractiveness for the international business community, Hong Kong had a score of 8.5 out of 10, ahead of Britain, the Netherlands, Singapore, Canada, and the United States. However, China was not among the top 30 countries (Yusuf & Wei, 2001). In the recent ten years, this situation has changed a lot vertically. China as a super nation on the earth has been increasingly open over time. However, the minister of Foreign Economic Research Department of State Council Development Research Center Guoqiang, Long stated in the China High Level Development Forum 2010 (20 March, 2010) that after comprehensive measure, China's economic liberalization index was far below the world average, which took the 5th place in the world's most less open countries. And compared to China's comprehensive national strength and international competitiveness, the degree of openness was a marked lag⁶. To measure a nation's economic openness, an index has been constructed. The openness of an economy is normally represented by the proportion of foreign related economic activities. Nowadays, the most important components in it are international trade (including trades in good and trades in services) and cross boarder investment (inflow and outflow). If we set the average level of economic openness in the world is 1, China Mainland's overall openness index is 0.54 which is far lower than 1. And both of the two sub-items (openness of international trade and openness of capital) are below 1 as well.

_

⁶ http://www.ce.cn/cysc/newmain/jdpd/zjxw/201003/20/t20100320_20297430.shtml

4 Hong Kong and Shanghai: Development and Financial Systems

4.1 The Causes for the formalization of International Financial Centers

From the aspect of Subject Study⁷, the causes for the formalization of international financial centers could be roughly categorized as four groups: (1) Natural Development Theory (or Demand Response Theory), which could explain the formalization of some traditional big financial cities, and emphasize that international financial centers are the natural results of economic development; (2) Government Guidance Theory (or Supply Guidance Theory), which could explain the large number of international financial centers emerged after the middle of 20th century, and emphasize the positive effect of policies; (3) Financial Aggregation Theory, which analyzes the formalization of international financial centers from the final outcome. Because there are two distinct and direct benefits of international financial centers, which are first, the efficiency could be improved if the transactions are centralized in a few setting places; and second, the facility could be brought by the close-distance communication (this theory would be described further in next part); and (4) Economies of Scale Theory, which is also a traditional thought, and based on the positive externality of financial activities.

However, if we have a look all the international financial centers in the history, most of their rises could not only be explained by one cause from those mentioned above, but a complex.

4.2 Evolution and Transformation

4.2.1 Hong Kong

⁷ Other mainstreams of studies include Object Study and Environment Study (Zhou, 2008).

Before 20th century, Hong Kong had been a little quiet fishing village with few settlements there for hundreds of years. The name Hong Kong appeared in history was after the Treaty of Nanking in 1842. And it was even harder to be seen on the written record until the engagement of Imperial China and the British colony in the territory. After then, Hong Kong was taken as a free port to serve the British Empire. The close and special relationship between it and the western advanced industrial countries drove Hong Kong to develop on a standard capitalistic way. However, at the same time, the impact from China was not that significant.

Entering 20th century, Hong Kong headed into the rapid economic and social development trajectory. Because the subtle isolation from the political atmosphere of China Mainland and the protection from the British, Hong Kong's city infrastructure, economic system, education system and all the other different social sectors could survive from the eight-year Sino-Japanese War, the 4-year Civil War and the destructive political turmoil which lasted for more than ten years in China Mainland. So Hong Kong's position made it become a natural refuge for capital. Therefore, just a few years after the war, Hong Kong became not only the one of the "Asia's Four Little Tigers", but also the one of the world's richest and most economically developed areas. And people here were enjoying the highest standard of living as well. Like Singapore, Hong Kong's way to international financial center began the role as an entrepot. After WWII, most Asian countries' economy were booming, which benefited from the thriving exportation. These countries owned cheap labors thus became the factories of the whole world. Hong Kong was among it at that time. And it is surrounded by sea and has been a reputed shipping center for a long time, which attracts a huge number of merchants to gather here. And this is an excellent environment for Hong Kong to develop its financial service industry.

In the late 1960s, international banks wanted to choose an Asian city to host the Asian Dollar Market as the extension of the Euro Dollar Market. At that moment, Japan was in the second phase of the rapid post-war-development, which means it focused on

internal economy more. But both Singapore and Hong Kong had the strength to catch this opportunity. However, before 1978, the Hong Kong government had always imposed a 15 % withholding tax on interest income from foreign currency deposits, which mattered international banks very much. Even following the bank crisis in 1965, the Hong Kong government was still imposing a moratorium on bank licensing.

1978 was a turning point for both Hong Kong and China Mainland. At this year, the Hong Kong government finally waived the moratoriums on banking licenses, which attracted huge numbers of foreign banks influx into this city (Kui, 1998). And more revolutionary, China Mainland began to apply the policy "Internal Reform and Opening-Up". Although Hong Kong is a natural gateway to China Mainland, it began to regain the entrepot role and could fully explore its potential only till this year. At that time, 80 % of Hong Kong's exports were domestic manufactures, 20 % reexports. Hong Kong had become the intermediary which connected China Mainland and the outside world. And Hong Kong itself was also moving toward the upper ranks of global traders (Bowring, 1997)⁸. And since then, Hong Kong really began to play in the world as a financial center. Throughout the 1960s, 1970s and early 1980s, depended on centripetal forces (Walter, 1993), Hong Kong developed to a regional financial center. The two main reasons included its privileged location and the appropriate time zone which allows 24-hour continuous trading of foreign exchange and gold when the two markets on western hemisphere (like New York and London) are closed (Kui, 1998).

Obviously, Hong Kong's geographic characteristics (small and mountainous terrain) make it can not utterly count on manufacturing sector for a long time. From about 1980, manufacturing declined in Hong Kong. But the higher value-added business stayed in Hong Kong. The lower labor and land costs like Guangzhou, Shenzhen and some other cities in South China (mainly in Guangdong) became the main production

-

⁸ Cohen, Warren I. and Zhao, Li (eds) (1997) *Hong Kong under Chinese Rule: The Economic and Political Implications of Reversion*. Cambridge University Press.

bases of Hong Kong, which was beneficial to its economy.

In 1990s, because of the rise of globalization, the global firms were decentering and Hong Kong started to more rely on centrifugal forces. Such forces drove the multinational enterprises build their various sectors of headquarters in this city. And from the survey in 1993, there were two most important factors brought about this situation: (1) the availability of banking and financial facilities and (2) high-quality infrastructure (Kui, 1998).

Before the handover of Hong Kong to China in 1997, lots of international observers and the heads of multinational enterprisers thought there would be a huge political instability in this city soon. So they moved enormous sums of money out during that period, or relocated some operational sectors of headquarters, which stalled Hong Kong's evolution to international financial center to some degree. However, the regime transfer was smooth, and Hong Kong continually improves steady and definitely becomes the Asia's leading financial, service and shipping center. So facts proved that the Communist Party of China's all policies in Hong Kong could push this city's development further. After the reunification with China Mainland for more than ten years, Hong Kong's economic structure has experienced a marked transformation: the manufacturing share of GDP fell from 8.3% in 1997 to 3.5% in 2006. Meanwhile, the service sector share increased from 78.8% to 87.4%9. And the manufacturing employment continued to transfer from the distribution of trade to finance, insurance, real estate, business services, and community, social and personal services. In 2007, the contribution of finance sector to Hong Kong's GDP reached to 20 % which was as twice as much the figure in 1997. Also, during this period, Hong Kong has overcome a series of difficulties including the Asian financial crisis, SARS and so on. And needless to say, the strong support from the China Mainland is one of the most important factors.

In modern history, Hong Kong has been one of the three most important and

⁹ http://baike.baidu.com/view/2607.htm#8

traditional international financial centers (the other two are New York and London) for a couple of years. Recently, there are two similar rankings which are "Global Financial Center Index" (GFCI) and "Xinhua-Dow Jones International Financial Centers Development Index" (IFCD). In the latest released report, Hong Kong was ranked NO.3¹⁰ after London and New York (see Table 4.1) from GFCI, while the gap between the top two cities is very small; and ranked the fourth place after New York, London and Tokyo from IFCD¹¹.

Table 4.1 The Global Financial Center Index 6 (Sep. 2009)

Centre	GFCI 6 Rating	GFCI 6 Rank	Change in	Change in
			Rating since	Rank since
			GFCI 5	GFCI 5
London	790	1	9	0
New York	774	2	6	0
Hong Kong	729	3	45	+1
Singapore	719	4	32	-1

Source: Global Financial Center Index (GFCI) 6, Sep 2009, City of London.

4.2.2 Shanghai

Same as Hong Kong, Shanghai had been a small village (living on fishing and textile) for a long time in the record, but without question it stepped into prosperity quite earlier than Hong Kong. During Song Dynasty (AD 960–AD 1279) Shanghai's status had been upgraded from a village to a market town (1074), which was usually taken as the starting point of the history of Shanghai. Shanghai began to flourish during Ming Dynasty (AD 1368–AD 1644). It began its modern commercial and industrial development in the second half of 19th century (Wei, 1987). In accordance with the Sino-British Treaty of Nanking signed in 1842, China should open five bunds as foreign trading ports in 1843 and Shanghai Bund was one of them. Nanking Treaty was the first unequal treaty in the modern history of China, since then, Chinese history has undergone immense changes, and became a semi-colonial and semi-feudal

11 http://www.chinadaily.com.cn/bizchina/2010-07/09/content 10087232.htm

 $^{^{10}\,}$ Global Financial Center Index (GFCI) 6, Sep 2009, City of London.

country. However, although this historic turning definitely impairs the sovereignty of China, from another respect, it could also be seen as the first policy-support for Shanghai. The direct impact was that it attracted numberless speculators who brought huge capital, marvelous ability or admirable venture-spirit. Therefore, the trade- and investment-activities in Shanghai became unprecedented prosperous at that moment and the city's splendid history began since then. It was one of the few international metropolises in modern Asia history. And the existence of concessions made Shanghai not be affected by the war directly and it could enjoy the actual status of independence and adequate international connections, which also brought Shanghai the continual prosperity.

And the real golden age of Shanghai was the 1920s when the population there was more than 2 million. And in 1936, Shanghai was ranked No.7 largest city in the world. Shanghai has been famous for its financial sector for a long time. Before 1949, there had already been many foreign banks and companies in Shanghai, which partly owes to the huge migration from other cities of China and the rest of the world. At that time, not only the four government banks (Central Bank, Bank of China, Bank of Communications and Agricultural Bank of China) which held the state capital and bureaucratic capital were all together in Shanghai, many famous foreign financial institutions including HSBC Bank (UK), Deutsche Asiatische Bank (Germany), Yokohama Specie Bank (Japan), Russo-Chinese Bank (Russia), Citibank (USA), Belgian banks (Belgium) and so on also established branches around the Bund, which formed the well-known "Oriental Wall Street". Also, there were a large number of private banks and trust companies operated by private capital. Therefore, Shanghai has a very good background to develop economy afterwards.

During the rule of the Kuomintang government and the following planned economy period, Shanghai's industrial level had always been top one in China. In 1978, China adopted the "Internal Reform and Opening-Up" policy, which mainly supported the southeastern region, so Shanghai was facing a crisis of marginalization at that time.

But since the mid-90s, along with the development of Pudong New Area, and many other reasons, Shanghai's industrial has met the second spring season. Shanghai's industrial output value accounts for one tenth of in China, mainly in textile, heavy industry, metallurgy, petrochemical, machinery and electronics industries, as well as cars, aviation, aerospace and so on. And a large number of high-end manufacturing have been gathered in Zhangjiang Hi-Tech. On the other side, Agriculture accounts for a small proportion of the overall economy, which is around 1.7 %. The economic structure in Shanghai exhibits the intervention of the government clearly.

Entering 21st century, Shanghai has been competing aggressively to be China's premier metropolis with the established center Hong Kong, and capital Beijing (Yusuf & Wei, 2001). Actually, Shanghai's GDP has been the top among all the China Mainland cities for many years. Especially at the beginning of 21st century, the figure of Shanghai was almost twice as the one of Beijing. But Beijing also develops at a fantastic speed. In 2008, based on the expenditure approach, Beijing's GDP was 10,488.03 hundred million RMB, while Shanghai's was 13,698.15. However, the gap is still there, and in 2009, the overall GDP of Shanghai reached 2,183 hundred million dollars which had already exceeded Hong Kong¹².

At present, Shanghai and its extending westward along Yangtze River and the southern region comprised of Hong Kong and Pearl River Delta are the two most developed areas in China. Since the last decade of 20th century, Shanghai has always been changing its industrial structure, which is with important strategic significance to the development of China towards a super power in the world. Except from the financial sector, other components of tertiary industry in Shanghai including real estate, insurance, logistics and so on are also having considerable amount of weight. In 2009, the proportion of tertiary industry, which is its core competitiveness (same as Hong Kong), accounts for Shanghai's GDP had reached 59.4 %. And in 2010, this section has surpassed 60 %.

-

¹² http://baike.baidu.com/view/1735.htm

These years, as China develop at a tremendous speed; Shanghai is also conspicuous as an international financial center. We could also get two rankings of Shanghai from GFCI and IFCD. From the former one, Shanghai was No. 35¹³ which was one place lower than it in last report. But in the latter one, it took the 8th place¹⁴ closely following the other seven renowned names in financial field: New York, London, Tokyo, Hong Kong, Paris, Singapore and Frankfurt. In last paragraph, we see Hong Kong's two positions from the two indexes, which are very reasonable. The difference could be explained by different statistic calibers and researching aspects. However, we may be a little confused about the two rankings of Shanghai because the disparity is huge. There are at least three points we should pay attention to. At first, IFCD is an outcome from the cooperation between Xinhua News Agency and Dow Jones Indexes, so it naturally focuses on Chinese cities more. On one hand, it could obtain more create figures; and on the other hand, it will be coated political color inevitably, which means we could see the high ranking as a tool to attract more attention and also an inspiration to this city and even the country. Secondly, the gap between Shanghai and Hong Kong is still big. At present, Shanghai can not get Hong Kong's achievement. At last, obviously, Shanghai's role as one of the most important international financial center has not been unanimously agreed by all the players. Or only when China develops to be one of the top countries one day, Shanghai could get a higher status synchronously.

4.3 Financial Systems

Financial system is a marketed and institutional arrangement which aims to set financial contracts and exchange the assets and risks. The members of financial system are various financial markets, intermediaries, service firms and other institutions used to execute the financial decisions of households, business firms and governments. The relationships among different participants in financial system could

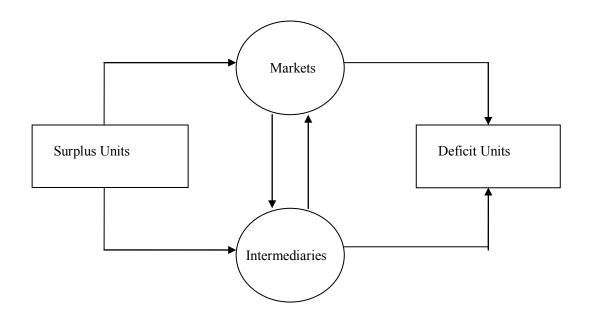
-

¹³ Global Financial Center Index (GFCI) 6, Sep 2009, City of London.

¹⁴ http://www.chinadaily.com.cn/bizchina/2010-07/09/content_10087232.htm

be exhibited in Figure 4.1. The funds flow from surplus units to deficit units through the financial system (Bodie & Merton, 2000).

Figure 4.1 The Flow of Funds



Source: Bodie, Zui & Merton, Robert C. (2000) Finance. Prentice Hall.

4.3.1 Hong Kong

In Hong Kong, the monetary authority and currency issuers are separated. Hong Kong Monetary Authority is the money authority. And the role of currency issuers is taken by three private commercial banks: Hong Kong & Shanghai Banking Corporation, Standard Chartered Bank and Bank of China.

And the financial services sector is consisted of three parts: banking industry, insurance industry and other financial services industry. From Table 4.2 we can see the situation of the three industries in 2007. And among them banking industry is the key role. From a broader perspective, Hong Kong is an offshore banking center for China Mainland (Kui, 1998). Hong Kong's banking system adopts a three-tire structure: licensed banks (LBs), restricted licensed banks (RLBs) and deposit-taking companies (DTCs). Except from those authorized institutions (AIs), the foreign banks

could also establish local representative offices (LROs) here. The insurance industry includes (1) general insurers, (2) life insurers, and (3) insurance agents, brokers and other insurance services. And the other financial services industry's constituents are (1) investment and holding companies, (2) personal loans, mortgages, installment credit, finance leasing, factoring and bill discounting companies, and (3) stock and share companies and other financial institutions (including those engaging in the asset management industry).

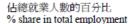
Table 4.2 Employments and Value Added (at current price) of the Financial Sector Services (HK\$ million)

	Employment	Value Added
Financial Service Sector	192,700	302,000
Banking	88,400	180,400
Insurance	43,000	23,500
Other Financial Service	61,200	98,000

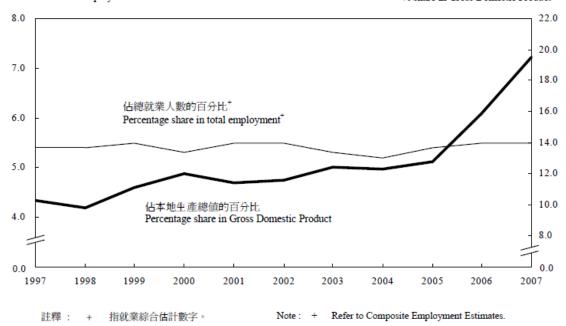
Source: *The Financial Services Sector in Hong Kong*. Hong Kong Monthly Digest of Statistics, April 2009.

During the ten years following Hong Kong's return to China Mainland, the financial services sector had developed a lot. The parentage share in total employment did not change obviously, but the contribution to GDP increased from about 4.3 % to 19.5%, which was a dramatic leap (See Graph 4.1).

Graph 4.1 Percentage Contribution of the Financial Services Sector to GDP (at current factor cost) and Total Employment, 1997 to 2007



佔本地生產總值的百分比 % share in Gross Domestic Product



Source: *The Financial Services Sector in Hong Kong*. Hong Kong Monthly Digest of Statistics, April 2009.

Since 17th October, 1983, Hong Kong adopted a pegging exchange rate called the Linked Exchange Rate System (one of Fixed Exchange rate) with the core rate is 7.8 Hong Kong dollars to 1 US dollar. This is Hong Kong Monetary Authority's first monetary politic approach. In this system, Hong Kong Monetary Authority aims to keep the stability of exchange rate through sound management of the exchange fund, monetary operations, and other appropriate methods. However, in near future (possible in five years), the exchange rate in Hong Kong may be pegged on a basket of currencies at a fixed exchange rate, not only US dollar.

4.3.2 Shanghai

The currency issuer in China Mainland is the central bank—People's Bank of China. The financial regulation progress could be divided into two stages. The first stage was before 1998, People's Bank of China implemented financial regulation completely. After 1998, the regulation on security industry and insurance industry were separated from the unified regulation under People's Bank of China, and charged by China

Securities Regulatory Commission (CSRC) and China Insurance Regulatory
Commission (CIRC) respectively. In 2003, China Banking Regulatory Commission
(CBRC) which took over the responsibility of regulating banking industry from
People's Bank of China was created. Since then, China Mainland formally established
a financial-regulation system with divided management and supervision segregation.
The three commissions have different functions which all focus on the relatively
microcosmic regulations. And People's Bank of China strengthens its ability of
formulating and implementing monetary policies. As the central bank, it takes the
responsibility for the safety of payment in financial system, the macroeconomic
control, and also the prevention and revolution of financial risks (Song, 2007)¹⁵. On
10th Aug, 2005, People's Bank of China set Shanghai Headquarters in Shanghai,
which ulteriorly indicated Shanghai's extremely important status in finance sector.

In China Mainland, the reform of financial system (including banking industry) has experienced three stages. The first one was from 1978 to 1992. During this period, the four major state-owned commercial banks (Bank of China, China Construction Bank, Industrial and Commercial Bank of China and Agricultural Bank of China) were separated from People's Bank of China. And the joint-stock commercial banks and the securities market were also established. In the second period was from 1993 to 1997, three main policy banks (China Development Bank, Export and Import Bank of China and Agricultural Development Bank of China) were created. The Southeast Asian Financial Crisis in 1997 was a watershed in the progress of the China financial system development. The influence of this crisis is continued to now. Since then, the third stage started. And in 2002, Chinese government began to brew a thorough reform of the state-owned commercial banks (RIETI, April, 2007)¹⁶. From the end of 2003 to the beginning of 2009, the four major banks had progressively completed the stockholding system reforms and initially established the modern banking system.

-

¹⁵ http://www.cs.com.cn/yh/04/200708/t20070810 1177098.htm

http://www.rieti.go.jp/cn/rr/47.html

Since 21st July, 2005 China Mainland began to implement a marked-based, more flexible and managerial exchange rate mechanism which is pegged to a basket of currencies instead of only one (US dollar).

5 A Comparative Functional Perspective: Hong Kong and Shanghai

The basis of this thesis is the functional perspective study which was put forwarded in 1995 by Robert C Merton and Zvi Bodie. And this functional perspective is based on two premises: (1) Financial functions are more stable than financial institutions. Because functions change less through time and across boarders; (2) Institutional form follows functions. Because the innovation and competitions among institutions would ultimately bring about greater efficiency in the performance of financial system's functions (Merton & Bodie, 1995)¹⁷. And according to their report, there are six primary functions of financial system: (1) To provide ways to transfer economic **resources** through time, across borders, and among industries; (2) To provide ways of managing risks; (3) To provide ways of clearing and settling payments to facilitate trade; (4) To provide a mechanism for the **pooling of resources** and for the subdividing of shares in various enterprises; (5) To provide price information to help coordinate decentralized decision-making in various sectors of the economy; (6) To provide ways of dealing with the **incentive problems** created when one party to a transaction has information that the other party does not or when one party acts as agent for another.

About the last two, because they are the functions with the financial system itself, the financial centers do not need exactly do something to make them, and they could not be facilitate to the building of international financial center either, they would not be discussed in detail in this thesis. Generally, for function (5), the information is particularly useful in making risk-management decisions (Bodie & Merton, 2000). And for function (6), the three main kinds of incentive problems are moral hazard problem, problem caused by asymmetric information and the principal-agent problem. These problems limit the abilities of financial market and intermediates to exert the

_

¹⁷ Crane, Dwight B. & others (eds) (1995) *The Global Financial System: A Functional Perspective*. Boston: Harvard Business School Press.

other functions, but financial system could provide methods to solve them.

In the following parts, I will first examine the main financial markets in Hong Kong and Shanghai and make a general comparison. The following parts will focus on the comparison through the functional perspectives of financial system. It will begin to discuss the offshore and onshore financial intermediates facilities provided by Hong Kong and Shanghai, which is related to function (1). Then the points of discussion of function (2) are about the insurance markets and derivative markets in the two cities. And for function (3) and (4), the most important fields which should be discussed on table are foreign exchange market and fund management industry.

5.1 Financial Markets in Hong Kong and Shanghai

Table 5.1 Financial Markets in Hong Kong and Shanghai

	Hong Kong	Shanghai
Foreign Exchange Market ¹⁸ (2007)		
-Amount US\$ bn ¹⁹	175	9*
-Share in the Global Market ²⁰	4.4%	0.2%
Derivative Market (2007) ²¹		
-Average Daily Turnover US\$ bn	160	1*
Equity Market (2009)		
-Market Capitalization	HK\$ 17,874.3 bn ²²	RMB 18,465.5 bn ²⁵

¹⁸ Foreign Exchange and Derivatives Market Activity in 2007. Triennial Central Bank Survey. Bank for International Settlements, December, 2007.

²⁰ Daily Average in April

¹⁹ Daily Average in April

²¹ Foreign Exchange and Derivatives Market Activity in 2007. Triennial Central Bank Survey. Bank for International Settlements, December, 2007.

-Total Turnover Value	HK\$ 11,640 bn ²³	RMB 34,651.2 bn ²⁶
		2 - 27
-Listed Companies	$1,319^{24}$	870 ²⁷
Bond Market		
-Total Turnover Value	HK\$ 3.97 m ²⁸	RMB 3,980.6 bn ²⁹
Insurance Market		
-No. of Establishments ³⁰ (2007)	1,917 ³¹	261 ³³
- Gross Total Premium (2008)	HK\$ 188.7 bn ³²	RMB 60 bn ³⁴

^{*} The data includes other members in China Mainland, not only Shanghai. However, Shanghai had the overwhelming share in those markets.

From this table, we could see the disparities in main financial markets of the two cities. Hong Kong is well ahead of Shanghai in most of the financial markets, only except of equity market and bond market. The statistics from 2008 shows, Shanghai's stock exchange volume was RMB 18,040 bn which continually ranked NO. 7 in the world (the top six were NASDAQ Exchange, New York Stock Exchange, London Stock Exchange, Tokyo Stock Exchange, Euronext and Deutsche Börse) and NO.2 in Asia-Pacific. As to the end of 2008, the market value of Shanghai Stock Exchange was RMB 9,730 bn which continually took the sixth place in the world (the top five

²² HKEx Factbook 2009. Hong Kong Exchange and Clearing Limited.

²⁵ Shanghai Stock Exchange Factbook 2009. Bureau of Statistics of Shanghai.

²³ HKEx Factbook 2009. Hong Kong Exchange and Clearing Limited.

²⁴ HKEx Factbook 2009. Hong Kong Exchange and Clearing Limited.

²⁶ Shanghai Stock Exchange Factbook 2009. Bureau of Statistics of Shanghai.

²⁷ Shanghai Stock Exchange Factbook 2009. Bureau of Statistics of Shanghai.

²⁸ HKEx Factbook 2009. Hong Kong Exchange and Clearing Limited.

²⁹ Shanghai Stock Exchange Factbook 2009. Bureau of Statistics of Shanghai.

³⁰ The establishments include general insurers, life insurers and insurance agents, brokers and other insurance services.

³¹ The Financial Services Sector in Hong Kong. Hong Kong Monthly Digest of Statistics, April 2009.

³² Office of Commissioner Insurance (HK). http://www.oci.gov.hk/stat/index.html

³³ Shanghai Statistical Yearbook 2009. Bureau of Statistics of Shanghai.

³⁴ Shanghai Statistical Yearbook 2009. Bureau of Statistics of Shanghai.

were New York Stock Exchange, Tokyo Stock Exchange, NASDAQ Exchange, Euronext and London Stock Exchange) and the second place in Asia-Pacific. But for the equity financing, in 2008, Shanghai Stock Exchange reached RMB 223.82 bn which was after Hong Kong Stock Exchange taking the eighth place in the world (the top seven were Euronext, New York Stock Exchange, London Stock Exchange, Hong Kong Stock Exchange, Australian Stock Exchange, Spanish Stock Exchange and Brazil Exchange) and the third place in Pacific-Asia³⁵.

(1) Foreign Exchange Market

In 1994, China Mainland established the unified national inter-bank foreign exchange market to be compatible with the socialist economic market. The trading center headquarter was built in Shanghai at the same time, and Beijing was the backup center. From Table 5.1, the absolute amount of market turnover in 2007 (daily April) in Hong Kong was around 19 times as it in Shanghai. For Hong Kong itself, it ranked NO.6 among all foreign exchange markets, following London (UK, 1,359), New York (USA, 664), Zurich (Switzerland, 242), Tokyo (Japan, 238) and Singapore (Singapore, 231)³⁶.

(2) Derivative Market

To the end of 2007, Hong Kong ranked NO.8 among all derivatives markets in the world, following London (UK, 2,105), New York (USA, 959), Paris (France, 278), Tokyo (Japan, 226), Zurich (Switzerland, 206), Singapore (Singapore, 210) and Frankfurt (Germany, 167). Meanwhile, Shanghai is on the bottom of this list³⁷. In 2009, the turnover in Hong Kong's securities derivative market achieved US\$ 394.3 bn which ranked NO.1 in the world³⁸. And Shanghai's derivative market also had developed a lot. In 2009, the total turnover of all kinds of products in Shanghai

37 Appendix II

³⁵ http://sjr.sh.gov.cn/main?main artid=34564&main colid=638&top id=

³⁶ Appendix I

³⁸ Hong Kong Exchanges and Clearing Limited http://www.hkex.com.hk/eng/index.htm

Futures Exchange amounted to RMB 73,760 which increased 1.6 times from the number of last year³⁹.

(3) Equity Market

To the end of 2009, the market capitalization in Hong Kong equity market included HK\$ 17,769.3 bn from Main Board and HK\$ 105 bn from Growth Enterprises Market (GEM). The total turnover included HK\$ 11,564.2 bn from Main Board and HK\$ 75.8 bn from GEM. And the number of listed companies was 1,319. Among them, there were 1,145 listed on Main Board and 174 listed on GEM; and there were 1,308 local companies and 11 foreign companies. In this respect, Shanghai had bigger market capitalization and total turnover than Hong Kong even considering the exchange rate (HK\$ 7.752 per US\$\frac{40}{2}\$ and RMB 6.831 per US\$\frac{1}{2}\$ in 2009).

(4) Bond Market

The scale of Shanghai's bond market was much bigger than Hong Kong's in 2009 if we look at it from the view of total turnover. And we also should notice that Hong Kong's bond market shrank a lot from 2008. The HK\$ 3.97 m was actually only 54%⁴¹ of the figure in 2008.

(5) Insurance Market

The number of establishments in Hong Kong was more than seven times as it in Shanghai. And in 2008, HKD per unit of USD was 7.787⁴² while RMB per unit of USD was 6.945. So the gross total premium in Hong Kong was about three times as it in Shanghai. Till the end of 2009, the insurance establishments in Shanghai were 307,

³⁹ Shanghai Economic and Social Development Statistical Communique 2009. Bureau of Statistics of Shanghai.

⁴⁰ Public Accounts, Monet and Finance. Hong Kong SAR Census and Statistic Department.

⁴¹ HKEx Factbook 2009. Hong Kong Exchange and Clearing Limited.

⁴² Public Accounts, Monet and Finance. Hong Kong SAR Census and Statistic Department.

and the gross total premium was RMB 66.5 bn⁴³. Even taking the different statistical criteria in the two cities into account, this gap is still extreme notable.

5.2 Transferring Economic Resources

The well-developed, smooth-functioning financial system provides lots of ways to help the economic resources transferring. And the financial intermediaries serve this function mainly. Simply to say, the first facet means people could get loans for their future plans. And in the respect of the second facet, the most two common methods include investing on foreign equities and loaning to companies abroad (Bodie & Merton, 2000). In detail, the banks and thrifts take actions in financing corporate investments and housing, insurance companies, pension funds in financing corporate investments and paying retirement annuities, and mutual funds that invest in virtually all sectors. And issuing and distributing securities contribute to this transferring function as well (Merton & Bodie, 1995)⁴⁴. In this paragraph I will focus on the financial intermediates facilities of Hong Kong and Shanghai.

First let's have a look the situation of loans and deposits in the two cities recently. As mentioned before, the loans could offer immediate capital supports to enterprisers inside and outside the region, which means the resources could be transferred through time and across geographic regions. And the deposit is the lifeline of financial intermediates especially commercial banks. It determines the profit space of them.

In Table 5.2, there is part of Hong Kong monetary statistics (deposit and loan) from at the end of December of 2009.

Table 5.2 Hong Kong Monetary Statistics in Dec., 2009⁴⁵ (Deposit and Loan)

⁴³ Shanghai Statistical Yearbook 2009. Bureau of Statistics of Shanghai.

⁴⁴ Crane, Dwight B. & others (eds) (1995) *The Global Financial System: A Functional Perspective*. Boston: Harvard Business School Press.

⁴⁵ Hong Kong Monetary Statistics 2009 Dec. Hong Kong Monetary Authority (HKMA).

Deposit (HK\$ m)

	HK\$	Foreign Currency	Total
Demand Deposits with Licensed Banks	476,922	230,578	707,500
Savings Deposits with Licensed Banks	1,766,999	931,881	2,698,800
Time Deposits with Licensed Banks	1,113,703* (1,113,316)	1,837,578** (1,837,965)	2,951,281
Total Deposits with Licensed Banks	3,357,624* (3,357,237)	3,000,037** (3,000,424)	6,357,661
Deposits with Restricted Licensed Banks	10,860	5,627	16,487
Deposits with Deposit-taking Companies	5,110	1,781	6,891
Deposits with all Authorized Institutions	3,373,595* (3,373,208)	3,007,445** (3,007,831)	6,381,039

^{*} adjusted to exclude foreign currency swap deposits

Note: Data may not add up to total due to rounding

Loan (HK\$ m)

	HK\$	Foreign Currency	Total
A. Extended by Licensed Banks			
To Finance HK's Visible Trades	59,147	71,973	131,120
To Finance Merchandising Trade not Touching HK	4,802	37,895	42,697
Other Loans for Use in HK	2,141,506	313,294	2,454,801
Other Loans for Use outside HK	140,999	413,161	554,159
Other Loans where the Place of Use is	5,546	22,291	27,837

^{**} adjusted to include foreign currency swap deposits

⁽⁾ unadjusted for foreign currency swap deposits

not Known			
Total Loans and Advances	2,351,999	858,615	3,210,614
B. Extended by Restricted Licensed			
Banks			
To Finance HK's Visible Trades	126	210	336
To Finance Merchandising Trade not		91	91
Touching HK	-	91	91
Other Loans for Use in HK	23,851	1,640	25,491
Other Loans for Use outside HK	3,034	23,936	26,970
Other Loans where the Place of Use is			
not Known	-	-	-
Total Loans and Advances	27,010	25,878	52,888
C. Deposits by Deposit-taking			
Companies			
To Finance HK's Visible Trades	214	326	540
To Finance Merchandising Trade not			
Touching HK	-	-	-
Other Loans for Use in HK	19,579	76	19,655
Other Loans for Use outside HK	2,592	2,264	4,856
Other Loans where the Place of Use is			
not Known	-	-	-
Total Loans and Advances	22,384	2,666	25,051

Note: Data may not add up to total due to rounding

Table 5.3 shows the loans and deposits of domestic and foreign financial institutions in Shanghai at the end of 2009.

Table 5.3 Deposits and Loans of Domestic and Foreign Financial Institutions in

 2009^{46}

		Change from
	Absolute Value	the Beginning
Index		of the Year
	RMB bn	
		RMB bn
Balance of all Accounts	446,2.027	901.088
-Enterprise and Public Institutions Deposit	227,7.228	497.924
-Residents' Savings Deposit	143,5.765	226.923
Loan Balance of all Accounts	296,8.410	537.155
-Short-term Loan	851.156	-32.994
-Media-term and Long-term Loan	179,3.357	412.612
-RMB Personal Consumption Loan (RMB) ⁴⁷	426.265	111.629
-Housing Mortgage Loan	391.288	99.607
-Personal Auto Loan	9.089	4.026

From the three tables, we could find Hong Kong has lager amount of deposits than Shanghai. And for the loans, it is hard to compare because there are four considerable parts lacking of data. But the gap between the two total amounts from the two cities is still not big in such a situation, which shows Hong Kong's strength in this respect.

Meanwhile, according to HKMA's monetary statistical report in 2009, Hong Kong's RMB deposits had been increasing at a relatively large scale. At the end of September

46

⁴⁶ Shanghai Economic and Social Development Statistical Communique 2009. Bureau of Statistics of Shanghai.

⁴⁷ Chinese-funded Commercial Bank

of 2009, Hong Kong's RMB deposits reached RMB 58.2 bn which was 102.7% of the data in August. And the foreign currency deposits only increased by 0.1%. This fact illustrates that at present, Hong Kong's commercial and financial strategies incline to China Mainland. There are at least three main courses. First, the trade between Hong Kong and China Mainland is thriving that is why there is heavy RMB which pours into Hong Kong's entrepreneurs' and residents' hands. Second, they keep the RMB deposits to buy the goods produced by China Mainland. Third, they keep the RMB deposits to buy financial products issued by Chinese-funded financial institutions. Therefore, Hong Kong is not only important among traditional developed countries, but also among rising Asian countries. The most conspicuous for this city should be the bridge between West and East.

Second is about the foreign corporation banking. Apparently, Hong Kong is far more than Shanghai. Since Hong Kong government removed its 15% interest withholding tax on foreign currency deposits in 1978, foreign banks here has enjoyed a continually rapid development. The number of them rose from 40 (1978) to 154 (1995). And in all licensed banks, the ones registered overseas and foreign-holding local banks accounted for more than 94%. 85 of the world biggest 100 banks opened branches in Hong Kong at then and in term of the number of foreign banks, Hong Kong ranked NO.3 in the world only after London and New York. At the end of August of 2010, there were 146 licensed banks among which 123 were incorporated outside Hong Kong. And there were 22 restricted licensed banks and 9 of them were incorporated outside Hong Kong Kong Kong. For the deposit-taking companies, there were 27 in all and none of them were incorporated outside Hong Kong. But of cause, these numbers were lower compared to them several years ago mainly because of the financial crisis recently.

Up to the end of April 2010, there were 20 foreign corporation banks in Shanghai, and

⁴⁸ *Number of Authorized Institutions and Local Representative Offices*. Hong Kong Monetary Authority (HKMA).

HSBC, Standard Chartered Bank, the Bank of East Asia and Citi Bank were the top four (asset size). In 2009, the international financial situation starts to get better and Shanghai's foreign corporation banking business also rebounds from the bottom, especially the high degree localization business. From the 2009 Foreign Corporation Banks Development Report which was released by Shanghai Banking Regulatory Bureau, the total assets of the 20 banks had been more than RMB 1,000 bn, the loans had exceeded RMB 570 bn, and the deposits had surmounted RMB 650 bn. What's more, the asset quality had continually improved, while the non-performing loans (also the rate of non-performing loans) had decreased. The big moves of these banks make many Chinese companies gain large foreign investments, and the "Double Centers Building" of Shanghai also promotes them. HSBC is just a typical example. In the context of the international financial crisis, Shanghai branch is one of the world's most rapidly growing branches because of the China market's huge power.

Although Shanghai displays its huge potential on foreign-banking business, the wide gap between it and Hong Kong reminds us to analyze the characteristics of Hong Kong's pattern. Firstly, foreign institutions enjoy exactly same rights as the local ones in Hong Kong. The former ones could engage in any onshore or offshore financial activities. And some well-reputed and strong foreign banks could even acquire up to 100% shares of local banks. Conversely, foreign banks are much more restricted in China Mainland. Although the foreign corporation banks could run overall RMB business in China Mainland, the branches of foreign banks are restricted seriously. Actually, the 2009 International Financial Markets Report released by the Chinese Central Bank in April of 2010, to the end of 2009, the total assets of foreign banks in China Mainland occupied from 2.16% (at the end of 2008) to 1.71% of the ones in all financial institutions. Secondly, the business of foreign banks in Hong Kong is very international. For example, from Table 5.2, it is clear that the foreign currency deposits, foreign loans and foreign liabilities accounts the bigger proportion in all deposits, loans and liabilities, which highlights Hong Kong's irreplaceable

⁴⁹ See Page 5.

international financial status. But the main aim of the foreign banks in China Mainland is to conduct RMB business, which should be too local. Thirdly, Hong Kong also actively takes part in global financial innovations. Hong Kong is always good at attracting the innovations because of its special historical, economic and political status, and it is also considered as the most ideal place to test those innovations.

Third is about the foreign listed companies in Hong Kong Stock Exchange and Shanghai Stock Exchange. From *HKEx Fact Book 2009*, there were 11 foreign companies (excluding the companies from China Mainland) on the list in 2009. This number is far behind it form London or New York, even Singapore, which seems not match to Hong Kong's situation. The truth is, the major investors in Hong Kong market are foreigners, which is why they do not need to invest the equities from their own countries in another region. So it is hard for Hong Kong to attract foreign companies to appear on its market. Therefore, Shanghai could take this responsibility and not impair Hong Kong. Shanghai Stock Exchange has been committed to develop "International Board" which aims to attract qualified foreign companies to appear on A stock market and the domestic investors invest on them by RMB. This activity would be helpful to promote the establishment of Shanghai as an international financial center. It is conductive to make Shanghai gather more financial resources from wider range and speed up Shanghai's market share the international standards⁵⁰.

5.3 Managing Risks

Risks are like capital, could be transferred by financial system. Insurance companies are the major financial intermediaries to transfer risks. Derivatives, as forwards, futures, swaps and options, are also important products to for risk allocation (Bodie & Merton, 2000). In this paragraph, I will compare the insurance markets and derivative markets of Hong Kong and Shanghai.

⁵⁰ http://www.cnstock.com/paper new/html/2010-03/16/content_3248.htm Shanghai Securities News.

First is about the insurance market. From Table 5.1, we could see Shanghai is far behind Hong Kong in this field. Hong Kong enjoys the most densely insurance companies in Asia-Pacific region. The history of Hong Kong insurance business started merely 150 years ago. At that moment, Hong Kong had already been the colony of the Great Britain. Because of the maturity of insurance business in this developed country, the one in Hong Kong also developed at a fantastic speed. However, one of the consequences is most of the large-scale insurance companies in Hong Kong are foreign companies, especially the ones origin from England account the bigger proportion. As London now is the world's largest insurance center, and there are many large British companies with branches in Hong Kong. There are six distinct characters of Hong Kong's insurance business⁵¹: (1) Insurance business is one of the most important pillars in Hong Kong's economy. In 2008, the total gross premium was HK\$ 188.7 bn, and the GDP of Hong Kong in that year was HK\$ 1,678.514 bn, so the insurance business contributed 11.24% of the GDP. But for Shanghai, in 2008, the total gross premium was RMB 60 bn, but Shanghai's GDP in that year was RMB 1,369.815 bn. Clearly the percentage had reached 5%. (2) There are numerous talents in Hong Kong's insurance industry. In 2008, there were 2,218 establishments, 50,842 persons engaged and 49,437 employees⁵². (3) Hong Kong adopts a mixed mode in finance field. That means, for example, when people go to Hong Kong's banks to open accounts, or invest in some financial products, the staffs would recommend some insurance products to them. By virtue of this mutual help, Hong Kong's insurance business could develop at a tremendous speed. (4) The insurance products in Hong Kong are very abundant. There are many of them can not be seen in China Mainland. (5) Hong Kong's insurance system is sound and well supervised, so the insurance business has established a good social image. At present, Hong Kong insurance business is just dividedly supervised by the government (Office of the Commissioner of Insurance) and some industry self-regulatory organization

_

⁵¹ http://info.xy178.com/archive/wangjing2977/blog 103944.html

⁵² Reports on 2008 Annual Surveys of Storage, Communication, Banking, Financing, Insurance and Business Service. Hong Kong SAR Census and Statistic Department.

(the most important is the Hong Kong Federation of Insurers). In China Mainland, insurance industry is authorized by the government (China Insurance Regulatory Commission), and in the provinces and municipalities, there are branches from this commission. According to the news⁵³ on 11th Sep, 2010, the secretary of Hong Kong Financial Service and the Treasury Bureau Chan said an independent insurance authority was in preparation. The notable consequences of this project would be first, the insurance industry could respond to the changing financial market rapidly; second, the protection of the insured persons could be improved; third, the whole industry could attract more talents. Actually, the more and more intensified global financial crisis is the fuse which ignites Hong Kong's increasing concentrate on regulatory system. And the establishment of this independent authority would be helpful to improve the insurance regulatory system, promote the sustainable of insurance market and enhance the market competitiveness, and then consolidate Hong Kong's international financial center status further. Chan also suggested that the independent Insurance Regulatory Bureau should directly be responsible for the licensing and the regulation of insurance intermediates. (6) Hong Kong's insurance business enjoys high degree of internationalization. To the end of 14th Sep, 2010, in all 169 (decreased from the number before financial crisis in 2008) authorized insurance companies, there are 88 registered in Hong Kong, while the rest are from 21 different countries or regions. Particularly, among the foreign companies, the Britain and American ones occupy the leading places⁵⁴.

Hong Kong's and Shanghai's insurance industries are at different stages. Shanghai started far below Hong Kong, and nowadays, the former has taken the latter as the most important bank-up support which is relevant to talents, capital and technic. Meanwhile, Hong Kong local insurance companies could develop in the mainland, which is helpful for them to keep stable and profitable. Therefore, the two cities should continue this cooperation road to achieve a win-win result.

_

⁵³ http://finance.sina.com.cn/money/insurance/bxdt/20100911/15158641647.shtml

⁵⁴ Hong Kong Authorized Insurance Companies List (up to 14th Sep, 2010).

Second is about the derivative market, and the main market in discussion here is futures and options market. The predecessor of Hong Kong Futures Exchange (HKFE) is Hong Kong Commodity Exchange (started running in 1977). The name was changed in 1984. In May of 1986, the Hang Seng Index Futures was introduced which was a milestone in the development of Hong Kong's derivative market. Soon, these futures had the largest exchange volume. To the end of 1998, Hang Seng Index Futures and Options contracts had accounted more than 90% in the total market trading volume (with the development of the market and the increasing varieties of products, this number has decreased sharply). Also at this moment, because of the influence of Asia Financial Crisis, Hong Kong government decided to conduct a comprehensive revolution of the securities and futures market. So in March of 2000, Hong Kong Stock Exchange (HKSE), HKFE and Hong Kong Securities Clearing Company Ltd. merged as to one, owned by the single holding company, Hong Kong Exchange and Clearing Ltd. (HKEx). Now there are five types of futures and options products including stork market index products, stock products, interest rate products, foreign exchange products and gold futures⁵⁵. Table 5.4⁵⁶ overviews the Hong Kong future and option market.

Table 5.4 Derivative Markets 2007-2009

(1) All Futures and Options Products (Excluding Stock Options)

	2007	2008	2009
NO. of Trading Days	245	243	247.5
Contract Volume	42,002,718	50,313,871	51,098,362
Equity Index Products	41,618,802	50,029,072	50,817,046
Equity Products	351,514	257,015	271,766
Interest Rates Products	32,402	24,709	2,777
Gold Futures*	-	3,075	6,773

⁵⁵ http://wiki.hexun.com/view/7934.html

⁵⁶ HKEx Factbook 2009. Hong Kong Exchange and Clearing Limited.

Average Daily	171,440	207,053	206,458
Open Interest at the Year End	465,980	321,768	455,898
Equity Index Products	457,894	309,661	451,269
Equity Products	5,954	9,449	4,407
Interest Rate Products	2,132	2,526	103
Gold Futures*	-	132	119

(2) Stock Options

	2007	2008	2009
NO. of Stock Options Classes at the Year End	47	49	51
NO. of Stock Options Series at the Year End	5,986	8,340	6,806
NO. of Newly Introduced Stock Options	6	3	6
Classes	0	5	O
NO. of Trading Days	245	243	247.5
Contract Volume			
Annual Total	45,982,968	54,692,865	47,439,896
Average Daily	187,686	225,074	191,676
Premium (HK\$ m)			
Annual Total	106,165	127,850	74,639
Average Daily	433	526	302
NO. of Trades			
Annual Total	1,006,542	1,579,169	1,612,285
Average Daily	4,108	6,499	6,514
Open Interest at the Year End	5,314,918	3,984,346	3,848,117
Contracts Exercised	6,664,451	8,012,542	6,413,688
Average Premium per Contract (HK\$)	2,309	2,338	1,573
Average Contract per Trade (Contracts)	46	35	29
NO. of Market Makers	24	22	19
Put Volume/Call Volume	1.08	1.08	1.21

Average Daily Contract Volume/Open	3.5%	5.6%	5.0%
Interest	3.370	3.070	3.070

(3) All Futures and Options Products

	2007	2008	2009
Contract Volume	87,985,686	105,006,736	98,538,258
Open Interest at the Year End	5,780,898	4,306,114	4,304,015

^{*} Trading on gold futures commenced on 20th Oct, 2008.

Different from Hong Kong futures and options market, Shanghai futures and options market mainly run the business of real commodities including gold, copper, aluminum, zinc, steel, wire, fuel oil and natural rubber. And until 8th April, 2010, the stock index futures product was launched in Shanghai, which was far behind Hong Kong in this field. A complete financial system is the core of building a real financial center, and stock Index Futures market is an indispensible part in the financial market. So the successful construction of it would definitely contribute to promoting Shanghai as the international financial center and it is also the result of implementing the spirit of the document⁵⁷ released from State Council.

5.4 Clearing and Settling Payments

One of the most important functions of financial system is to provide an efficient payment system to facilitate the exchange of goods, services and assets (Bodie & Merton, 2000). Here the "Pay System" means a set of institutional arrangements of clearing and settling payments⁵⁸. And in this paragraph, I will mainly examine the foreign exchange markets⁵⁹ in Hong Kong and Shanghai.

After abolishing exchange control in 1973, great amount international capital flowed

_

⁵⁷ See Page 5.

⁵⁸ Crane, Dwight B. & others (eds) (1995) *The Global Financial System: A Functional Perspective*. Boston: Harvard Business School Press.

⁵⁹ See Foreign Exchange Market Turnover in Appendix II.

Kong's foreign exchange market started to develop at high speed from then. This market is invisible (like most of other important global foreign exchange markets, such as London, New York and Tokyo), and the traders conduct foreign exchange contracts through a variety of modern communication facilities and computer networks. The trading in Hong Kong's foreign exchange market could be divided into two kinds. The first one is HK dollar to other foreign currencies including US dollar, Japanese yen, Euro, Canadian dollar, Australia dollar and other major currencies, and the currencies of Southeastern Asian countries. And also RMB is in it. The second one is US dollars to other currencies, which aims to transfer international capital among multinational companies and international banks.

The foreign exchange market in Shanghai is also invisible. The market adopts the electronic auction trading system. Compared to Hong Kong market Shanghai market is much less international. The RMB foreign exchange varieties in this center are relatively monotonous. There are only US dollar, Euro, Japanese yen, HK dollar and Pound sterling. At present, the Chinese government is considering expanding the varieties of RMB exchanging, and Russian ruble, South Korean won and Malaysian ringgit are the most possible three in near future. The most important foreign exchange market participants are banks. And now, because foreign exchange could not only be an international settlement tool, but also an important investment manner, a large number of fund companies, insurance companies and other international institutions are also actively involved in the foreign exchange market, and they have been the main driver of this market. In the process of building Shanghai as the international financial center, more and more foreign financial institutions would enter in this huge market, which would form a well backstage for the construction of a foreign exchange center. Therefore, the establishment of international financial center and the development of the foreign exchange market could actually form a

complementary and mutually reinforcing relationship⁶⁰.

Unlike London and New York, both the currencies of Hong Kong and Shanghai are not the major currencies in the world. So they can not operate as the clearing and settlement center with their respective currencies. But both Hong Kong dollars and RMB are pegged to US dollars, which is very helpful to the two cities. Meanwhile, the two currencies themselves are close related. However, the big problem in front of Shanghai is the low level of internationalization. As mentioned before, in Shanghai's foreign exchange market there are only very few kinds of currencies. But in Hong Kong, the types of currencies nearly cover all the major currencies, and also the major currencies in Asia area. The latter one is very important because like Malaysia, Indonesia and Thailand that are all export-oriented countries. They export raw materials, and also import components and export finished products. Most of these tractions are carried out in either US dollars or Japanese yen. And although these countries are under different exchange rate polices, their currencies are pegged to US dollars directly or indirectly. So US dollar has been the main vehicle currency in this region. And Japanese yen comes second (Kui, 1998). Therefore Hong Kong could be the most important foreign exchange market in this region than Shanghai more easily.

5.5 Pooling of Resources and Subdividing of Shares

A financial system could provide a kind of mechanism for reserving funds to take large-scale indivisible enterprise, or for subdividing shares of large-scale enterprises among their huge number of owners (Bodie & Merton, 2000). Here I will mainly talk about the comparison of fund management industries of Hong Kong and Shanghai.

Hong Kong's fund market has already developed for thirty years. The factors contribute to its success are low tax system, few restrictions, financial talents and perfect telecommunication infrastructure. The most significant feature of this market is international. The fund companies, investment market and asset classes, and the

⁶⁰ http://www.p5w.net/news/gncj/200902/t2150032.htm

registration places of the fund products are all including local ones and foreign ones. Hong Kong has very diversified fund types, and the retail fund market is mainly formed with the open-government-raised funds recognized by Hong Kong SFC⁶¹. Table 5.5 shows the market value and trading value for unit trusts and mutual funds in 2009.

Table 5.5 Market Value and Trading Value for Unit Trusts and Mutual Funds in 2009

(1) Market Value

	ETF*	REIT**	Others	Total
Market Value (HK\$ m)	4,860,547.91	724,695.12	28,157.3	5,613,400.33
NO. of Issues	391	84	24	499

Source: HKEx Factbook 2009. Hong Kong Exchange and Clearing Limited.

(2) Trading Value

	NO. of	ETF	REIT	Others	Total	
	Trading					
	Days	(HK\$ m)	(HK\$ m)	(HK\$ m)	(HK\$ m)	
Jan	18	24,793.46	2,501.02	42.71	27,337.19	
Feb	20	40,584,84	2,204.00	69.60	42,858.44	
Mar	22	37,289,91	3,023.08	64.90	40,377.89	
Apr	20	35,814.97	4,241.77	122.99	40,179.73	
May	19	31,761.04	4,419.15	94.19	36,274.38	
Jun	22	39,640.83	5,362.88	79.85	45,083.56	
Jul	22	45,709.62	3,192.21	97.00	48,998.82	
Aug	21	65,530.58	3,857.99	70.07	69,458.63	
Sep	22	56,745.79	4,149.67	66.78	60,962.24	

⁶¹ http://finance.sina.com.cn/economist/jingjiguancha/20070405/19283477011.shtml

57

^{*} Exchange Traded Funds

^{**} Real Estate Investment Trust

Oct	20	38,407.85	3,642.83	136.10	42,186.77
Nov	21	42,974.24	3,871.14	100.31	46,945.69
Dec	22	40,432.74	2,612.37	102.71	43,147.81

Source: HKEx Factbook 2009. Hong Kong Exchange and Clearing Limited.

To the end of 2009, there were 6 ETF, 54 open-end funds and 13 closed-end funds traded in Shanghai Stock Exchange. With the development, the market has been covering major international fund products, and the market becomes more attractive and competitive. However, all data are far behind Hong Kong for this market has only developed for merely twelve years. As the plan of building Shanghai as the international financial center, the key and also the most important thing should be learnt from Hong Kong experience is an appropriate regulatory framework. All along, the Hong Kong Securities and Futures Commission could gain a balance in formulating the relevant regulations, which effectively promotes the development of local fund market. This framework could not only provide adequate protection for investors, but also accommodate different geographic requirements with sufficient flexibility. With the rapid growth of fund market, more and more small investors are attracted to participant into it. But these investors actually do not have satisfying financial knowledge, which is likely to bring irrational investment and market bubbles. So another significant thing in Shanghai fund market is to enforce the education of investors.

6 Conclusions

There is no doubt that the gap between Hong Kong and Shanghai is very large,

although Shanghai has always been the leader among the cities of China Mainland in nearly all fields. So the aim of this thesis is not to emphasize this fact again, but conclude practical experience from Hong Kong and give meaningful advices to Shanghai.

Hong Kong's rise has its own unique reasons such as historical factor, superior geographic advantages and economic freedom. However, this city is such a good model that Shanghai could master the trend of international finance in short time. The strengths which Shanghai should pay much attention are (1) sound and prudential regulations; (2) high degree of technological infrastructure; (3) the ways to attract international talents; (4) completed financial markets and support services; and (5) high-quality (educated, rational, and with necessary financial knowledge) local investors.

These years Shanghai has developed at a tremendous speed, but because the directions and functions (as international financial centers) of Hong Kong and it are not quite similar, Shanghai will never replace Hong Kong. However, for itself, there are lots of respects it should improve, especially for the relatively young markets like derivative market and fund market.

From "Two Centers Construction" in the document⁶² released from State Council, the overall objectives of this great programme include at the end of 2020, Shanghai had basically been the international financial center which (1) adapts to China's economic strength and the international status of RMB at that moment; (2) attracts both domestic and foreign investors to participate; (3) is with high degree of internationalization, and relatively completed featured (trading, pricing and information) multi-layer financial market system; (4) is mainly formed by financial institutions with internationally competition and influence, and supported by other various financial institutions.

⁶² See Page 5.

Generally, around these objectives, Shanghai should strengthen the financial market system, the financial institutions and business systems, improve financial services, and improve the financial environment. From above we have already seen many concrete facets Shanghai should attention. But in all, the most important two keystones on the pathway to a world city are economic openness and perfect legislations. The first one depends on the China Mainland's openness, but now the situation is worrying⁶³. Therefore, the urgent priority is to enhance the openness of China Mainland's economy further, which is the sufficient condition of the construction of Shanghai as the international financial center. Economic liberalization would bring more international institutions and foreign investors. Only like this, Shanghai could really operate international capital and contribute to the world economics. However, this activity could also give rise to huge risk. Because more closely related to the global market, the financial system tends to become more fragile, and irrational institutions and investors would more easily to bear the loss. So, completed, tight and good regulations are extremely important. All participants in the market should be constrained, and which also is a protection. And then, the financial system could last efficient and healthy, and Shanghai will be the real international financial center.

Appendix I – Foreign Exchange Market Turnover

63 See Page 24.

60

Geographical distribution of reported foreign exchange market turnover¹ Daily averages in April, in billions of US dollars and per cent

	1998		20	01	200	04 ²	2007		
	Amount	% share	Amount	% share	Amount	% share	Amount	% share	
Argentina	2	0.1			1	0.0	1	0.0	
Australia	47	2.4	52	3.2	102	4.2	170	4.3	
Austria	11	0.6	8	0.5	13	0.5	18	0.4	
Bahrain	2	0.1	3	0.2	3	0.1	3	0.1	
Belgium	27	1.4	10	0.6	20	0.8	48	1.2	
Brazil ³	5	0.3	5	0.3	3	0.1	5	0.1	
Bulgaria							1	0.0	
Canada	37	1.9	42	2.6	54	2.2	60	1.5	
Chile	1	0.1	2	0.1	2	0.1	4	0.1	
China⁴	0	0.0	0	0.0	1	0.0	9	0.2	
Colombia			0	0.0	1	0.0	2	0.0	
Czech Republic	5	0.3	2	0.1	2	0.1	5	0.1	
Denmark	27	1.4	23	1.4	41	1.7	86	2.2	
Estonia					0	0.0	1	0.0	
Finland	4	0.2	2	0.1	2	0.1	8	0.2	
France	72	3.7	48	3.0	64	2.6	120	3.0	
Germany	94	4.8	88	5.5	118	4.8	99	2.5	
Greece	7	0.4	5	0.3	4	0.2	5	0.1	
Hong Kong SAR	79	4.0	67	4.1	102	4.2	175	4.4	
Hungary	1	0.1	1	0.0	3	0.1	7	0.2	
India	2	0.1	3	0.2	7	0.3	34	0.9	
Indonesia	2	0.1	4	0.2	2	0.1	3	0.1	
Ireland	10	0.5	8	0.5	7	0.3	11	0.3	
Israel			1	0.1	5	0.2	8	0.2	
Italy	28	1.4	17	1.0	20	0.8	36	0.9	
Japan	136	6.9	147	9.1	199	8.2	238	6.0	
Korea	4	0.2	10	0.6	20	0.8	33	0.8	
Latvia					2	0.1	3	0.1	
Lithuania					1	0.0	1	0.0	
Luxembourg	22	1.1	13	0.8	14	0.6	43	1.1	
Malaysia	1	0.1	1	0.1	2	0.1	3	0.1	
Mexico	9	0.5	9	0.5	15	0.6	15	0.4	
Netherlands	41	2.1	30	1.9	49	2.0	24	0.6	
New Zealand	7	0.4	4	0.2	7	0.3	12	0.3	
Norway	9	0.5	13	0.8	14	0.6	32	0.8	
Peru			0	0.0	0	0.0	1	0.0	
Philippines	1	0.1	1	0.1	1	0.0	2	0.1	
Poland	3	0.2	5	0.3	6	0.3	9	0.2	
Portugal	4	0.2	2	0.1	2	0.1	3	0.1	
Romania							3	0.1	
Russia	7	0.4	10	0.6	30	1.2	50	1.3	
Saudi Arabia	2	0.1	2	0.1	2	0.1	4	0.1	
For footnotes, see the end of the table.									

Geographical distribution of reported foreign exchange market turnover¹ (cont)

Daily averages in April, in billions of US dollars and per cent

	1998		20	01	20	04 ²	2007		
	Amount	% share	Amount	% share	Amount	% share	Amount	% share	
Singapore	139	7.1	101	6.2	125	5.2	231	5.8	
Slovakia			1	0.0	2	0.1	3	0.1	
Slovenia			0	0.0	0	0.0	0	0.0	
South Africa	9	0.5	10	0.6	10	0.4	14	0.3	
Spain	19	1.0	8	0.5	14	0.6	16	0.4	
Sweden	15	0.8	24	1.5	31	1.3	42	1.1	
Switzerland	82	4.2	71	4.4	79	3.3	242	6.1	
Taiwan, China	5	0.3	4	0.3	8	0.3	15	0.4	
Thailand	3	0.2	2	0.1	3	0.1	6	0.2	
Turkey			1	0.1	3	0.1	3	0.1	
United Kingdom	637	32.5	504	31.2	753	31.0	1,359	34.1	
United States	351	17.9	254	15.7	461	19.2	664	16.6	
Total	1,969	100	1,616	100	2,429	100	3,988	100	

¹ Adjusted for local double-counting ("net-gross"). ² Data for 2004 have been revised. ³ For 1998, spot transactions only. ⁴ For 1998, 2001 and 2004, spot transactions only. Table B.2

Source: Foreign Exchange and Derivatives Market Activity in 2007. Triennial Central Bank Survey.

Bank for International Settlements, December, 2007.

Appendix II – Derivatives Market Activity

Geographical distribution of reported OTC derivatives market activity¹

Average daily turnover, in billions of US dollars

	L	Total Foreign exchange ² Int			iterest rate	e ^s			
	2001	20044	2007	2001	2004 ⁴	2007	2001	2004	2007
Argentina			0			0			
Australia	51	84	155	41	71	132	10	13	2
Austria	8	23	18	4	9	13	4	14	
Bahrain	2	1	2	2	1	2	0	0	
Belgium	22	45	57	8	14	35	14	31	:
Brazil	2	2	1	2	1	1	0	1	
Bulgaria			0			0			
Canada	43	53	71	33	41	50	10	12	:
Chile	1	1	2	1	1	2	0	0	
China			1			1			
Colombia	0	0	1	0	0	1	0		
Czech Republic	1	2	4	1	1	4	0	1	
Denmark	25	44	83	20	33	73	6	11	
Estonia		0	1		0	1			
Finland	2	1	11	1	1	8	1	0	
France	106	205	278	41	54	102	65	151	1
Germany	159	127	167	65	85	77	94	43	!
Greece	3	3	4	3	3	4	0	0	
Hong Kong SAR	52	82	160	49	70	143	3	11	
Hungary	0	2	5	0	2	5	0	0	
India	2	4	27	2	3	24	0	1	
Indonesia	1	1	1	1	1	1	0	0	
Ireland	11	15	15	5	3	7	6	12	
Israel	0	2	5	0	2	5	0		
Italy	36	53	56	12	15	26	24	38	;
Japan	132	185	226	116	154	149	16	31	1
Korea	4	11	23	4	10	18	0	1	
Latvia		1	2		1	2			
Lithuania		0	0		0	0		0	
Luxembourg	13	19	34	9	11	31	5	7	
Malaysia	1	1	2	1	1	2	0	0	
Mexico	5	6	14	4	5	11	0	1	
Netherlands	49	61	49	25	42	22	24	19	:
New Zealand	3	7	14	3	6	11	0	1	
Norway	12	17	35	10	12	29	3	5	
Peru	0	0	0	0	0	0	0		
Philippines	1	0	1	1	0	1	0	0	
Poland	4	6	10	3	5	7	1	1	
Portugal	1	2	4	1	1	3	0	1	
Romania			2			2			
Russia	0	6	16	0	6	16	0		
Saudi Arabia	1	1	2	1	1	2	0	0	

Geographical distribution of reported OTC derivatives market activity¹ (cont) Average daily turnover, in billions of US dollars

	Total			Foreign exchange ²			Interest rate ³			
	2001	20044	2007	2001	20044	2007	2001	2004	2007	
Singapore	73	100	210	69	91	153	3	9	57	
Slovakia	1	1	3	1	1	3	0			
Slovenia	0	0	0	0	0	0	0		0	
South Africa	8	11	15	8	8	11	1	3	4	
Spain	26	22	28	6	10	11	20	12	17	
Sweden	22	32	48	19	25	36	3	7	12	
Switzerland	63	74	206	53	62	145	10	12	61	
Taiwan, China	2	6	8	2	5	7	0	2	1	
Thailand	1	2	5	1	2	5	0	0	0	
Turkey	1	2	3	1	2	3	0	0	0	
United Kingdom	628	1,176	2,105	390	613	1,148	238	563	957	
United States	285	599	959	169	281	434	116	317	525	
Total	1,862	3,098	5,149	1,186	1,769	2,976	676	1,331	2,173	

¹ Adjusted for local double-counting ("net-gross"). ² Including outright forwards and foreign exchange swaps. ³ Single currency contracts only. ⁴ Data for 2004 have been revised. Table C.4

Source: Foreign Exchange and Derivatives Market Activity in 2007. Triennial Central Bank Survey.

Bank for International Settlements, December, 2007.

Bibliographies

Websites

http://en.wikipedia.org/wiki/Hong Kong [29/03/2010]

http://en.wikipedia.org/wiki/Shanghai [29/03/2010]

The Central People's Government of PRC http://english.gov.cn/index.htm [29/03/2010]

http://baike.baidu.com/view/1735.htm [05/04/2010]

http://baike.baidu.com/view/2607.htm [05/04/2010]

http://www.ndcnc.gov.cn/datalib/2004/AreaSummary/DL/DL-20040210132039 [02/07/2010]

http://www.chinadaily.com.cn/bizchina/2010-07/09/content_10087232.htm [08/08/2010]

http://www.ce.cn/cysc/newmain/jdpd/zjxw/201003/20/t20100320_20297430.shtml [08/08/2010]

http://www.cs.com.cn/yh/04/200708/t20070810_1177098.htm [09/08/2010]

http://www.rieti.go.jp/cn/rr/47.html [10/08/2010]

http://sjr.sh.gov.cn/main?main_artid=34564&main_colid=638&top_id=[11/09/2010]

http://www.cnstock.com/paper_new/html/2010-03/16/content_3248.htm [15/09/2010]

http://info.xy178.com/archive/wangjing2977/blog 103944.html [17/09/2010]

http://finance.sina.com.cn/money/insurance/bxdt/20100911/15158641647.shtml

[19/09/2010]

http://wiki.hexun.com/view/7934.html [19/09/2010]

http://www.p5w.net/news/gncj/200902/t2150032.htm [20/09/2010]

http://finance.sina.com.cn/economist/jingjiguancha/20070405/19283477011.shtml [21/09/2010]

Database

Bureau of Statistics of Shanghai http://www.stats-sh.gov.cn/2008shtj/index.asp

China Economics http://www.ce.cn/

China Securities http://www.cs.com.cn/

Hong Kong Exchanges and Clearing Limited http://www.hkex.com.hk/eng/index.htm

Hong Kong Monetary Authority (HKMA) http://www.info.gov.hk/hkma/

Hong Kong SAR Census and Statistic Department http://www.censtatd.gov.hk/

International Monetary Fund (IMF) http://www.imf.org/external/index.htm

National Bureau of Statistics of China http://www.stats.gov.cn/

Office of the Commissioner Insurance (the Government of Hong Kong SAR)

http://www.oci.gov.hk/about/index.html

Outward Investment and Economic Cooperation

http://fec.mofcom.gov.cn/index.shtml

World Bank (WB) http://www.worldbank.org/

World Economic Forum (WEF)

http://www.weforum.org/en/initiatives/gcp/FinancialDevelopmentReport/index.htm

Shanghai Finance http://sjr.sh.gov.cn/

Shanghai Stock Exchange http://static.sse.com.cn/sseportal/ps/zhs/home.html

Shanghai Futures Exchange http://www.shfe.com.cn/index.html

Essays and Reports

Brulhart, Marius (1998) *Economic Geography, Industry Location and Trade: The Evidence*. The World Economy, Vol. 21, 1998.

Capelle-Blancard, Gunther & Tadjeddine, Yamina (2009) *The Location of Financial Activities: The Impact of New Technologies and the Financial Crisis*. University Paris X Nanterre.

Desai, Mihir A. (2009) *The Decentering of the Global Firm*. Harvard University and NBER.

Jarvis, Darryl S. L. (2009) *Race for the Money: International Financial Centers in Asia*. National University of Singapore.

Kindleberger, Charles P. (1974) *The Formation of Financial Centers: A Study in Comparative Economic History*. Princeton Studies in International Finance, No. 36, pp. 6.

Kui, Ng Beoy (1998) *Hong Kong and Singapore as International Financial Centers:*A Comparative Functional Perspective. Nanyang Technological University,
Singapore.

Ottaviano, Gianmarco I. P. & Puga, Diego (1997) *Agglomeration in the Global Economy: a Survey of the "New Economic Geography"*. Center for Economic Performance, Discussion Paper No.356, August 1997.

Reed, Howard C. (1980) The *Ascent of Tokyo as an International Financial Center*. Journal of International Business Studies, Vol. 11, No. 3 (Winter, 1980), pp.19-35.

Reed, Howard C. (1989) Financial center hegemony, interest rates and the global political economy.

Schenk, Catherine R. (2002) *Banks and the Emergence of Hong Kong as an International Financial Center*. Journal of International Financial Markets, Institutions and Money, 12 (2002), 321-340.

Song, Shiyun (2007) *The Current Situation of China's Financial Regulatory System and the Suggestions to the Reform*. Securities Daily, Aug, 2007.

Venables, Anthony J. (eds) (2005) *Economic Geography: Spatial Interactions in the World Economy*. London School of Economics and CEPR.

Yusuf, Shahid & Wu, Weiping (2001) *Shanghai Rising in a Globalizing World*. Policy Research Working Paper. The World Bank Development Research Group, June 2001.

Foreign Exchange and Derivatives Market Activity in 2007. Triennial Central Bank Survey. Bank for International Settlements, December, 2007.

Global Financial Center Index (GFCI) 6, Sep 2009. City of London.

HKEx Factbook 2009. Hong Kong Exchange and Clearing Limited.

Hong Kong Authorized Insurance Companies List (up to 14th Sep, 2010).

Hong Kong Monetary Statistics 2009 Dec. Hong Kong Monetary Authority (HKMA).

Public Accounts, Monet and Finance. Hong Kong SAR Census and Statistic Department.

Reports on 2008 Annual Surveys of Storage, Communication, Banking, Financing,

Insurance and Business Service. Hong Kong SAR Census and Statistic Department.

Shanghai Economic and Social Development Statistical Communique 2009. Bureau of Statistics of Shanghai.

Shanghai Stock Exchange Factbook 2009. Bureau of Statistics of Shanghai.

Shanghai Statistical Yearbook 2009. Bureau of Statistics of Shanghai.

The Financial Services Sector in Hong Kong. Hong Kong Monthly Digest of Statistics, April 2009.

Xinhua-Dow Jones International Financial Centers Development Index, July 2010.

Books

Bodie, Zui & Merton, Robert C. (2000) Finance. Prentice Hall.

Cohen, Warren I. & Zhao, Li (eds) (1997) *Hong Kong under Chinese Rule: The Economic and Political Implications of Reversion*. Cambridge University Press.

Crane, Dwight B. & others (eds) (1995) *The Global Financial System: A Functional Perspective*. Boston: Harvard Business School Press.

Hair, J., Bush, R., & Ortinau, D. (2003) *Marketing research within changing information environment (2nd ed.)*. McGraw-Hill Irwin.

Hill, Charles W. L. (2009) International Business (7th ed.). McGraw-Hill Irwin.

Kanbur, Ravi & Venables, Anthony J. (eds) (2005) *Spatial Inequality and Development*. Oxford: Oxford University Press.

Pugel, Thomas A. (2007) *International Economics (13th ed.)*. Boston: McGraw-Hill/Irwin.

Reed, H.C. (1981) *The Pre-Eminence of International Financial Centers*. New York: Praeger.

Saunders, M., Lewis P. & Thornhill, A. (2007) *Research methods for business students (4th ed.)*. Harlow: Financial Times/Prentice Hall.

Walter, Ingo (1993) *High Performance Financial System: Blueprint for Development*. Singapore: ASEAN Economic Research Unit, Institute of Southeast Asian Studies.

Wei, Betty Peh-T'I (1987) *Shanghai: Crucible of China*. Oxford and New York: Oxford University Press.

Zhou, Tianyun (2008) *Hong Kong International Financial Center Study*. Pecking University Press.