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Conditions and Comparison on Shanghai's Construction into an International Financial Center

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Abstract: This study maintains that in a static view, an international financial center requires five general conditions: Economic scale and quality, financial stock and flow, government policy and management and service level. To become an international financial center, Shanghai should measure itself against the acknowledged international financial centers. Therefore, we make a comparison between Shanghai and Hongkong by Principal Component Analysis to find the distance between Shanghai and the low level international financial center. In a dynamic view, Shanghai has the potentiality of an international financial center, so, Shanghai's construction into an international financial center is unshakable.

Key words: International financial center, static comparison, dynamic comparison

INTRODUCTION

Building Shanghai into an international financial center is a great project with theoretical ground and reality basis. Furthermore, at the present moment, under the circumstance of international financial turbulence and the change of international financial order, it is of even greater significance to do so. This study, in an attempt of building related index system, measures Shanghai against Hongkong so as to know clearly the distance between them and thus build Shanghai into an international financial intentionally. It also provides a new idea of research on building Shanghai into an international financial center.

CONDITIONS OF SHANGHAI BUILDING INTO AN INTERNATIONAL FINANCIAL CENTER-A STATIC PERSPECTIVE

General view of conditions of building financial centers:

- **Economic scale and its quality:** The world financial centers, New York, London, Tokyo and Hongkong are all backed up by large-scale real economy which supplies economic security for the capital trading range and scale. The Drift Theory of international financial centers also proves it. The financial scale is the basis of building financial centers. Only when the economy develops to a certain scale can big financial need be generated and the aggregate of financial institutes and the expansion of financial assets scale be promoted. The components of measuring economic scale are urban

encroachment, total population, gross domestic product (GDP), government receipts and so on. Economic quality is demonstrated by per capita income level, productivity of labor, industrial structure, especially the percentage of the tertiary industry and so on. So, an international financial center should combine economic scale and economic quality. Populations, area, GDP are basis while productivity of labor, industrial structure consist the key factors reflecting the international level. At present, Shanghai's economic scale and population meet the standard of international financial centers, but it shows a tremendous disparity in economic quality

- **Financial stock and flow:** The integration of financial stock and flow reflect the connotation of international financial centers. Take London international financial center for example, the Banker magazine released the top 30 world banks for 2004 based on their Tier 1 capital. Three of them registered in London, ranking respectively the third, the thirteenth and the twenty-sixth. Twenty percent of the global banker service is managed here. In London stock exchange, there are 453 foreign companies, among which there are 180 foreign security companies. About half of the global stock trading volume is accomplished here. Seventy five percent of the top 500 world companies have set up branch companies or offices. Though there are many domestic and foreign financial institutes at present in Shanghai, the overall property scale and financial flow of foreign financial institutes are small and the financial products are relatively few

Table 1: Contrast between Shanghai and some international financial centers in terms of economic scale and quality in 2004

Scale				Quality	
A	B	C	D	E	F (%)
1	780	4070	1800	22222	89
2	1580	2847	719	39800	88
3	2155	7848	1230	59980	87
4	1103	1640	680	24140	90
5	6341	760	1350	5980	52

From Global Urban Competitiveness Report (2005~2006) in 2007. 1: New York, 2: London, 3: Tokyo, 4: Hongkong, 5: Shanghai, A: City, B: Area (km₂), C: GDP (\$ a hundred million), D: Population (ten thousand), E: Per capita GDP(\$), F:Percentage of tertiary industry

Table 2: System of indexes of financial centers, weight of indexes and the mark of indexes. (Shanghai vs. Hongkong)

1	2	Mark	3	Mark
A	0.255	68.9		
A ₁			0.153	100
A ₂			0.171	100
A ₃			0.182	46
A ₄			0.236	58
A ₅			0.258	56
B	0.239	68.6		
B ₁			0.194	85
B ₂			0.208	96
B ₃			0.216	56
B ₄			0.168	45
B ₅			0.214	58
C	0.124	51.1		
C ₁			0.188	28
C ₂			0.238	19
C ₃			0.218	100
C ₄			0.184	76
C ₅			0.172	32
D	0.195	65.5		
D ₁			0.195	68
D ₂			0.226	39
D ₃			0.218	42
D ₄			0.183	88
D ₅			0.178	100
E	0.187	72.5		
E ₁			0.246	24
E ₂			0.208	64
E ₃			0.185	100
E ₄			0.173	92
E ₅			0.188	100

- Institutional arrangement of finance:** London financial city boasts the highest level of openness. The free and open environment attracted a large number of multinational corporations and financial institutes. The same is true with Hongkong. The reason why Shanghai in China before liberation was regarded as the biggest international financial center was also related to its open financial environment. Before the war of Resistance against Japan, Shanghai allowed the free flow of currency. There was no exchange control and investment environment was flexible. The open environment and institutions facilitated Shanghai to be the far-east international financial center

- Financial management and service level:** While, in China, the risk-resisting ability of financial market is in urgent need of improvement. The percentage of financial practitioners is low and we are lack of specialized personnel familiar with international market. As to the financial service, we are short of big international financial agencies
- Credit of domestic currency:** The higher level of marketization a country possesses, the higher credibility its foreign trade exchange. The flexibility exchange rate and the convertibility of domestic currency will exert influence on the dependence of foreign trade and the number of foreign trade states and regions as well, finally on the formation of financial center. Though China displays a high level of dependence of foreign trade, its currency, namely, RMB lacks of flexibility concerning exchange rate which results in the situation that foreign trade states and regions are grouped and RMB shows a low level of credibility (You and Hu, 2012). In spite of the fact that the economic aggregate of China has already exceeded that of England, yet the credibility of RMB is much lower than Pound (Yu, 2011)

Therefore, the formation of a financial center in modern society is dependent on a developed core city of a well-developed country. As the most important carriers and platforms of financial competition, financial centers are the most important symbols displaying the overall strength of a country or region and the core competitiveness of a city (Bhattacharya, 2011).

Contrast between Shanghai and Hongkong: In order to find out whether Shanghai can be listed as a financial center, we need to measure it against the generally acknowledged financial centers, such as the worst kind of financial centers. If it is worse than the worst financial centers, it does not deserve the name of a financial center. Truth is, no one sees it as a financial center. In this study, we design five main factors in building financial centers to analyze their weight in the international financial centers by use of Principal Component Analysis. Regarding each factor in Hongkong as 100 marks, we make a contrast between Shanghai and Hongkong so as to get the mark of Shanghai. In this way, we can have a clear knowledge of the gap between the two cities (Table 1). The related information is as follows:

- Design of indexes:** To refrain from subjectivity, this paper obtains weight by Principal Component Analysis, the advantage of which lies in the objectivity. By this method, we can simplify the

statistical data under the condition of retaining the original data so as to uncover the relationship between the variables more clearly. The weight we choose is the related index of the first principle component in the mark order of the following indexes, from which we can get the comparative marks of Shanghai and Hongkong. The computational formula is as follows:

$$Y = \sum_{i=1}^5 X_i Z_i \quad (1)$$

In (1), X_i ($i = 1, 5$) is weight of the principle component, Z_i ($i = 1, 5$) the mark of this factor:

$$Z_i = \frac{S_{1i}}{S_{2i}} \times 100 \quad (2)$$

In (2), S_{1i} is the data of Shanghai, S_{2i} is the data of Hongkong. If the data of Shanghai is bigger than that of Hongkong, Z_i is 100. If Shanghai covers a larger area than that of Hongkong, its business costs are lower than those of Hongkong (Table 2).

First principal component

Economic scale and quality: We use the following five indexes to measure the economic scale and quality.

- A1 is the total area. It is the space an international financial center covers
- A2 is the total population of a city
- A3 is the total amount of GDP which to a certain degree shows the economic scale of an international financial center
- A4 is the per capita GDP of a city which is suggestive of the economic development level of a city and the quality of its economic operation
- A5 is the percentage of the tertiary industry which is the quality index of the economic development

Second principal component

Financial stock and flow: We use the following five indexes to measure the financial stock and flow:

- B1 is the total amount of financial assets
- B2 is the number of financial institutions
- B3 is the percentage of financial assets in GDP
- B4 is the number of financial instruments
- B5 is the average volume of business per day of financial assets

The former four indexes reflect the stock and conglomeration of financial assets and the latter the flow of finance.

Third principal component

The institutional arrangement of finance: It is the key factor of an international financial center. Because it has something to do with the international status of a market economy, it gives rise to some troubles to our design. So, we have to represent it in the following aspects:

- C1 is the competitive status a financial market. In Shanghai, it is reflected by the percentage of the deposit taken by the non-state financial institutions in the overall financial institutions while in Hongkong, it is reflected by the percentage of the deposit taken by non-local financial institutions in the overall financial institutions
- C2 is the marketization of the distribution of credit funds. In Shanghai, it is generally reflected by the percentage of deposit taken by non-state enterprises from state-owned banks. The percentage of that in Hongkong is assumed as 1
- C3 is the degree of the introduction of foreign capital. High degree of foreign investment reflects the sound market environment and manifests the degree of recognition of financial systems. In Shanghai, it is measured by the percentage of foreign investment in GDP
- C4 is the market order which is indicated by the number of economic cases happened in that very year. The more economic cases there are, the worse the market order is
- C5 is the protection of property rights which is the important condition of safeguarding technical market order, ensuring technological development and innovation. We use the number of complaint concerning the property right of the two cities in that very year

Fourth principal component

Financial management and service level:

- D1 is the fluctuation of stock market, esp. the fluctuation of stock price index
- D2 is the number of cases investigated and treated by the financial regulators
- D3 is the number of financial agencies
- D4 is the number of financial practitioners
- D5 is the business costs

Fifth principal component

Credibility of domestic currency:

- E1 is the flexibility of exchange rate
- E2 is the dependence of foreign trade
- E3 is the number of foreign trade states
- E4 is the number of foreign financial institutions
- E5 is the percentage of foreign exchange reserve in the sum of import and export

Result of data processing: According to the design of the aforementioned indexes, by dint of SPSS software, we obtain the weight of the principal components and the branch indexes, the mark of each branch index and then we get the mark of each principal component with the weight of the branch index. The results are shown below.

From Shanghai Econom Almanac, Almanac of China's Economy, Almanac Of China's Finance And Banking (2006), The yearbook of world economy (2005).

- 1: System of indexes
- 2: Weight of Principal components
- 3: Weight of Branch Indexes

From (1), we get the mark of Shanghai, 66.7 points which means that when compared with a low-level international financial center, Hongkong, Shanghai only gets less than 67 points. It goes without doubt that there is a long gap between Shanghai and the top international financial centers. From the branch indexes, we can discern that the institutional arrangement of finance gets the lowest point next to the financial management and service level.

In the economic scale and quality index, the percentage of the tertiary industry ranks the lowest; in the financial stock and flow index, the number of financial instruments ranks the lowest; in the institutional arrangement index, the marketization of finance and distribution of credit funds gets a low mark; in the index of financial management and service level, the number of financial agencies and financial cases gets a low mark; in the index of credit of domestic currency, the flexibility of exchange rate gets the lowest mark. Chances are that the design of the index system will affect the result of SPSS software, but the result we obtain is compatible with reality, so our aim is more or less realized.

POTENTIALITY OF SHANGHAI'S BUILDING INTO AN INTERNATIONAL FINANCIAL CENTER-A DYNAMIC PERSPECTIVE

Through the foregoing static contrast, we see the gap between Shanghai and Hongkong. From a dynamic perspective, like the potential share in the stock market,

Shanghai is a potential international financial center. In Nov. 2005, London financial city disseminated a piece of inspiring news that Shanghai in China may be the third international financial center if there is to be one in the next 10-20 years while Hongkong, Singapore and Tokyo are at best regional financial centers. The report is based on the investigation of 400 senior financial experts from more than 20 countries in the world, the authority of which is beyond doubt. The potentiality of Shanghai as international financial centers is manifested in the following aspects.

Fundamental foundation of the rapid economic development in China: China has maintained a higher GDP growth rate for many years. Suppose the annual GDP growth rate reached 5% in the 14 years between 2006 and 2010, China's GDP would reach 40 trillion Yuan. If the growth rate reached 10%, GDP would come up to 75 trillion Yuan. The massive growth of China's total GDP indicates that the Chinese economy plays an increasingly important role in the world; more and more countries come to notice the tremendous potential of the Chinese economy which provides global capital flow great room for profit.

Along with the increase of the import and export scale, the international trade activities are becoming much more frequent. From related data, we can see China's current trade volume ranked the third in 2005. The increasing the size and speed of trade growth rate has made China the cornerstone of world trade center. China's imports and exports of goods and services volume has made the relative position RMB in global trade, the relative position of RMB in the world's major reserve currency (Hong, 2008).

Origin of the history of the financial center Shanghai: In modern Chinese economy, Shanghai is the largest financial center and the birthplace of China's modern financial industry. In 1897, Imperial Bank of China was born in Shanghai which marked that the new bank began to replace the old-fashioned Chinese private bank. In 1935 there were 164 banks in China, the number of head offices in Shanghai reached 58 (including 28 branches in other cities).

Before liberation Shanghai has formed various types of financial markets in China which could be regarded as comprehensive and all-around, indicating Shanghai were almost at the same level of the development of international financial market and has become the principal financial center in the Far East. The trade volume of gold market was just below London, New York and above Paris, France, India, Mumbai, Tokyo and Osaka in Japan. The silver market of Shanghai is not only of large scale but also closely related to international silver

market. The pricing of London market often drew information of the transaction of Shanghai. Shanghai was also a large-scale foreign exchange market and it was far more vigorous than the closed foreign exchange controls implemented in Japan.

Shanghai was also the largest concentration place of foreign banks in the Far East. Since the opening to the world in 1843, Shanghai has always been the concentration place of foreign banks. From the 90 years between 1847 and 1936, 63 foreign-funded banks are established here. During the 1920s and 1930s, Shanghai was the reign that absorbed the most banks which exceeded the number of Tokyo, Singapore, Bangkok, Hong Kong and the rest.

All in all, the financial center vestige half a century ago still holds great appeal for the tourists when they are wandering Shanghai (Yonghong, 2005). Shanghai's foreign culture has become people's topics of conversation at leisure, or the materials of film and television programs which provides cultural heritage, historical origins and valuable experience for the construction of international financial center.

Reality basis of building an international financial center in Shanghai: Shanghai is located in the gold district of developing international financial centers. The development of financial centers in the whole world is oriented towards three points, that is to say, the three financial centers should be distributed evenly along the three time zones. In this way, they can provide a unified service for the economic globalization and facilitate the financial activities in the economic zone. Since the location of New York and London are well-established and stable, the location of the third area is restricted. Shanghai is just located in the required place.

Shanghai is blessed with the fine economic and geographic conditions. Behind it is the rich Yangtze River Delta Area, it is located in the west bank of the Pacific Ocean and the inlet of Yangtze River. Shanghai is the traffic artery linking China and the places in the world and is the biggest port city. Shanghai enjoys a similar geographic location with New York and London.

The Yangtze River Delta Area around Shanghai exhibits the strongest economic strength and the fastest growth rate. The Yangtze River Delta Area urban group led by Shanghai is between the North and South Pole; therefore, it has a strong radiating ability. Shanghai international financial center can radiate the whole country through radiating the Yangtze River Delta Area. The advantageous location is an important factor facilitating the project of building Shanghai into an international financial center. The modern shanghai has

the best location which can not be matched by other cities in China. Shanghai not only has the solid economic foundation but also displays the leading economic growth rate (Jiang, 2003).

Shanghai has formed relatively sound national financial market system, including currency market, such as inter-bank loan market between Chinese banks, inter-bank bond market (financial bill, enterprise bill and short-term bond market), bank deposit and credit market and so on, capital market, insurance market, futures market and foreign exchange market. Apart from that, Shanghai gold market and Shanghai equity transaction market are also very active. The numerous financial institutions provide excellent overall market environment for the development of Shanghai financial center.

All kinds of financial institutions cluster in Shanghai and are keeping good development tendency. A host of multinational corporations are attracted to invest in Shanghai and many Chinese general headquarters are set up in Shanghai. Shanghai is becoming the most concentrated area of our country as far as attracting foreign-funded financial institutions are concerned.

Lu Jiazui financial district has already had good basis. At present, the number of profit-making foreign-funded banks accounts for 31% of the total in China. The general assets of the foreign-funded banks add up to 370 billion RMB, taking up 52.8% of the total in China. More than 20 Chinese and foreign banks including Citi Bank, HSBC, the Standard Chartered Bank, Bank of Communications have set up business centers in Lu Jiazui. As of the end of 2005, the scale of business in Shanghai Stock Exchange accounts for 80% in China. The scale of Shanghai Futures Exchange takes up half of the total in China and Shanghai Financial Derivatives Exchange is about to open (Wang, 2009).

CONCLUSION

From the static perspective, there is a big gap between Shanghai and international financial centers in terms of institutional, financial environment and financial aggregate and flow. However, due to its big economic scale, fast economic growth rate, fine geographical and strong financial basis, Shanghai is a potential international financial center. The construction of a financial center is a systematic project. The economic scale and quality, financial stock and flow can be achieved as economy develops, but the opening of finance, the level of supervision, the expansion of financial instruments, the training of financial talents can only be realized stepwise. The credit of domestic currency is not only related to the institutional arrangement of

government but also to the openness of foreign trade. Another key factor in building a financial center is the importance the central or local government attaches. The government has to be one-minded and take measures to guard against the dispersing of financial resources in the region which will lead to the regional competition.

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REFERENCES

- Bhattacharya, A.K., 2011. The feasibility of establishing an international financial center in shanghai. *J. Asia-Pacific Bus.*, 12: 123-140.
- Hong, J., 2008. Building Shanghai into an International Financial Center is the outcome of deeping financial system reform. *China Finance*, April 2008.
- Jiang, B., 2003. The basic thought of Shanghai's building into an International Financial Center. *New Finance*, Vol. 07
- Wang, Z., 2009. The conglomeration of financial institutions and the construction of international financial center. *Shanghai J. Econ.*, Vol. 9
- Yonghong, J., 2005. The historical opportunities and environment in building Shanghai into an international fianncial center. *Shanghai Comm.*, Vol. 8
- You, C. and C. Hu, 2012. Study on the construction of Shanghai international financial center in the process of internationalization of RMB. *Financial Perspect.*, Vol. 3
- Yu, L., 2011. RMB internationalization and Shanghai international financial center construction research. *Proceedings of the 2nd International Conference on Business Computing and Global Informatization*, October 12-14, 2012, Shanghai China, pp: 403-405.