

International Financial Centers and the Competition over Financial Talents: Implications for Shanghai

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This paper discusses Shanghai's ambition to build an international financial center and the implication for financial talents competition. Shanghai was the largest financial center in the Far East in the early 20 century and is now the financial center of China. But there is still a huge gap to the first-class financial center like New York or London. The lack of international and advanced financial talents impedes Shanghai's step. To attract more financial talents to work and live in Shanghai, it is must to open the financial markets, reform the taxation systems and provide more live convenience to them.

INTRODUCTION

It is universally acknowledged that talent is essential for building an international financial center. Globally, a leading financial center is most often also a hub of financial professionals. Shanghai has generated and been working with a strong commitment to talent development, attraction and retention since the central government of China made the strategic decision to turn Shanghai into an international financial center. The city has mobilized all possible resources available to create an environment with international comparative advantages to gather domestic and foreign financial leaders to form an international financial talent hub.

It would never be an easy task for a city in developing country to compete with cities in advanced economy in attracting financial talents. Wall Street of New York, Canary Wharf of London and the Central of Hong Kong are famous for their bank skyscrapers and talents in them. How about Lujiazui of Shanghai or Jinrongjie of Beijing?

In this paper, we try to analyze the status of financial talent in Shanghai and compare it to that of other leading international financial centers.

DYNAMICS OF SHANGHAI FINANCIAL CENTER DEVELOPMENT AND THE INTERNATIONAL COMPARISON

Brief History of Shanghai Financial Center

In the early twentieth century, Shanghai was among the largest international financial centers in the Far East area, and the top financial center of China. There were 27 foreign banks in Shanghai in 1936, including HSBC of Britain, City Bank and Chase Bank of U.S., Credit Agricole of France, and Sumitomo Mitsui Bank of Japan, which amount to 30 percent of total banks in Shanghai. There were many Chinese and foreign corporate stocks and bonds exchanged in the Shanghai Stock Exchange, and 15 foreign currencies exchanged in Shanghai's foreign exchange market. The gold and silver market of Shanghai was larger than that of Paris, with annual amount of 31.16 million of gold and 1 billion ounce of silver. Shanghai was also the shipping center of the Far East, and the shipping finance was very popular.

The founding of People's Republic in 1949 transformed Shanghai into a grey industry city. Most of the financial markets was closed, foreign banks and businesspersons exiled, and finance was no more than the bookkeeper of the government.

It was not until China's reform and opening up in 1978 that Shanghai began to construct a modern international financial center. In less than two decades, the inter-bank money and bond market, foreign exchange market, gold market, bill market, securities market, futures market, property rights markets and insurance market had been opened in Shanghai, as well as the financial market infrastructures underlined them. In 2009 the State Council (central government) announced a plan to make Shanghai an international financial center in accordance with the country's economic strength and the international status of its currency by 2020. Since then the construction of Shanghai International Financial Center became a clear state strategy. The China (Shanghai) Pilot Free Trade Zone (SPFTZ), the first such Free Trade Zone that opened in September 2013 with emphasis on financial reform and opening up, was the latest step to push Shanghai to be an excellent financial center.

The Latest Progress of Shanghai Financial Center

After decade's construction, Shanghai has become the financial center of China with complete financial markets system, and is becoming the global innovation, exchange, pricing and settlement center for RMB (China's currency) products.

Firstly, Shanghai has built a complete financial market system and become one of the few cities with most complete kind of financial markets. The financial elements markets including security, bond, money, foreign exchange, gold, futures, bills and insurance cluster in Shanghai and its annual exchange value amounts to 1300 trillion yuan. More than 85 percent of direct finance of China comes from Shanghai financial market. In 2016, Shanghai's stock exchange value was the fourth largest in the world. In 2017 Shanghai Gold Exchange became the second largest gold exchange in the world in terms of exchange-traded volume. Moreover, the Shanghai Futures Exchange is now one of the three largest pricing center for copper.

Secondly, Shanghai has become the cluster area of financial institutions from both domestic and abroad. As to the end of June, 2017 there were 1519 financial institutions in Shanghai, 30 percent of them are foreign institutions. The New Development Bank (NDB), the China International Payment Service Corporation (CIPS), and the International Central Clearing Counterparty Association (CCP12) founded in Shanghai. Almost half of the corporate foreign banks, corporate foreign property insurance companies and joint-venture fund management companies have their headquarters in Shanghai.

Thirdly, Shanghai is the frontier of China's financial opening up with many innovation policies. The SPFTZ founded in 2013 aims to broaden financial opening up, including capital account liberalization, RMB internationalization. There have been published 95 financial innovation cases in the SPFTZ, with lots of innovation in macro prudent supervision of cross-border finance, facilities for cross-border RMB settlement, simplify of foreign exchange management, registration system of shipping insurance products. More than 20 innovation policies have been replicated to other areas of China.

Fourthly, the financial environment of Shanghai is continually better. Shanghai municipal government has long among the local governments with the highest efficiency and transparency, and Shanghai people are well known for their abiding the rules. The Shanghai Financial Arbitration Institute is opened in 2007, and Shanghai Financial Court is to opened in this August. Located in Shanghai, the Credit Reference Center of the People’s Bank of China has established a modern credit report system for both enterprises and individuals. There are also lots of law firms and accounting firms to provide professional service for Shanghai’s financial industry.

International Comparison of Shanghai and Leading International Financial Centers

We make a comparison of Shanghai and other leading international financial centers such as New York, London, Hong Kong, Singapore and Tokyo. The data are provided by GFCI, the Global Financial Centers Index, a leading index on international financial center.

From Table 1 we can see that in the latest six GFCI reports from September 2015 to March 2018, London and New York have always ranked the first and second of the world. Hong Kong and Singapore are ranked the third and fourth alternatively, while Tokyo is keeping the fifth. Shanghai, which was only ranked the 21th in GFCI-18 in September 2015, jumped to the 16th half a year later, to 13th in March 2017, and then to the sixth in September 2017 in GFCI-22. There were no another city that had made such rapid progress in international financial center evaluation in just three years.

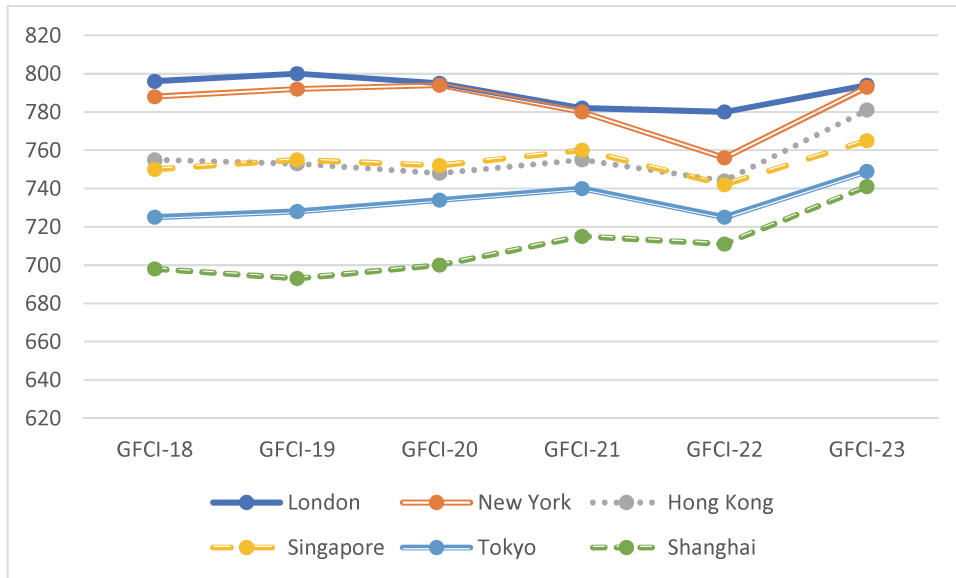
TABLE 1
THE TOP 10 FINANCIAL CENTERS IN THE LATEST SIX GFCI RANKING

Rank	GFCI-23 Mar. 2018	GFCI-22 Sep. 2017	GFCI-21 Mar. 2017	GFCI-20 Sep. 2016	GFCI-19 Mar. 2016	GFCI-18 Sep. 2015
1	London	London	London	London	London	London
2	New York	New York	New York	New York	New York	New York
3	Hong Kong	Hong Kong	Singapore	Singapore	Singapore	Hong Kong
4	Singapore	Singapore	Hong Kong	Hong Kong	Hong Kong	Singapore
5	Tokyo	Tokyo	Tokyo	Tokyo	Tokyo	Tokyo
6	Shanghai	Shanghai	Los Angeles	Los Angeles	Zurich	Soul
7	Toronto	Toronto	Chicago	Boston	Washington D.C.	Zurich
8	Los Angeles	Sydney	Sydney	Chicago	Los Angeles	Toronto
9	Sydney	Zurich	Boston	Zurich	Boston	Los Angeles
10	Boston	Beijing	Toronto	Washington D.C.	Toronto	Washington D.C.

Source: GFCI reports, related issues.

Fig.1 depicts the evaluation value of six selected cities since GFCI-18. According this figure the six cities can be grouped into three layers. The first layer are London and New York, two most eminent financial centers in the world. Those two are also leading in every sub-sector of the GFCI evaluation (see Table 2 at next page), and with their domestic currency, dollar and sterling pound respectively, the most important international currencies issued by a single country. The second layer are Hong Kong and Singapore, two offshore financial centers without a domestic international currency of their own, alternatively being the third or fourth. Tokyo and Shanghai are the third layer financial centers, higher than other cities but still big gaps to the second layer. It is interesting to notice that their motherland, Japan and China, are the third and second largest economy in the world, and both with a less free financial market and a less internationalized domestic currency.

**FIGURE 1
GFCI VALUE OF SELECTED CITIES**



Source: GFCI reports, related issues.

The GFCI evaluation considers five sub-sectors of competitiveness: business environment, human capital, infrastructure, financial sector development, and reputation. Table 2 gives the top 15 cities by each sub-sector. As we mentioned, London and New York are the top two in almost every sector, and the top four are exclusively London, New York, Hong Kong, Singapore. Shanghai are numbered fifth in four of the five sub-sectors, with one sub-sector (reputation) ranked the seventh.

**TABLE 2
GFCI-22 TOP 15 BY AREA OF COMPETITIVENESS**

Rank	Business Environment	Human Capital	Infrastructure	Financial Sector Development	Reputation
1	London	London	London	London	London
2	New York	New York	New York	New York	Hong Kong
3	Hong Kong	Hong Kong	Hong Kong	Hong Kong	Singapore
4	Singapore	Singapore	Singapore	Singapore	New York
5	Shanghai	Shanghai	Shanghai	Shanghai	Tokyo
6	Tokyo	Frankfurt	Beijing	Tokyo	Dubai
7	Frankfurt	Zurich	Tokyo	Beijing	Shanghai
8	Chicago	Beijing	Frankfurt	Boston	Stockholm
9	Zurich	Tokyo	Boston	Chicago	Frankfurt
10	Boston	Luxembourg	San Francisco	San Francisco	Toronto

Source: GFCI reports, related issues

HUMAN RESOURCE DEVELOPMENT RELATED WITH SHANGHAI FINANCIAL SECTOR

We see from Table 2 that human resource is an important sub-sector for international center evaluation. How are the status of Shanghai in terms of financial human resource development? We analysis this from two dimensions: quantity and quality. Our data base on a survey on financial talents coordinated by the Office for Financial Services of Shanghai Municipal Government in June 2015. In this survey, the financial sector includes 16 subsectors: banking, securities, fund, futures, insurance, trust, asset management, group finance, financial leasing, micro-lending, financing guarantee, pawn, financing leasing, factoring, third-party payment and markets. There are altogether 2052 financial companies surveyed, of which 1917 reported data as requested, accounting for 94.3% of the total.

Quantity of Financial Talents in Shanghai

According to the data reported by the 1917 financial companies, as of June 30, 2015, the total number of practitioners engaged in financial activities in Shanghai is 270724. Among them 129563 are male and 141161 are female. In terms of geographic distribution, Pudong New Area, where the Lujiazui financial district locates in, is the home of 859 financial companies and 181854 practitioners, more than two third of the total practitioners of Shanghai.

The total financial service workforce in Shanghai includes 227352 employees of financial companies, 22251 leased staff and 21121 other practitioners, accounting for 84%, 8.2% and 7.8% respectively of the total. The number of foreign financial practitioners in Shanghai is relatively small, with 1047 from Hong Kong SAR, Macao SAR and Taiwan province, and 1835 from other countries.

Among the 270724 financial practitioners in Shanghai, there are 15826 person who have returned from overseas studies, accounting for 5.85% of the total. They include those who studied overseas and got a bachelor's or higher degree from overseas education institutions, and those who got a bachelor's or higher degree in China and have oversea study experience of more than one year, such as visiting scholars or research fellows.

Quality of Financial Talents in Shanghai

We evaluate the quality of financial talents from four dimension: age, academic background, professional qualification, and professional certification.

Age Structure

Age is a fundamental element of talent quality since an over-aged personal would more likely related to an outdated industry. Overall, the financial workforce in Shanghai is rather young. According to the survey, of the 227352 employees of financial companies in Shanghai, those aged below 30 account for 39.1%, aged 30-39 account for 36.5%, aged 40-49 account for 18.2%, while those aged above 50 account for only 6.2%.

Academic Background

From the academic perspective, highly educated practitioners represent a large proportion of the total financial workforce in Shanghai. 77% of the total employees have a bachelor's degree or higher, among them 57.36% have a bachelor's degree, 18.82% have a master's degree, and 0.84% have a doctoral degree. For those do not hold a bachelor's degree, 17.04% have a junior college diploma, the other 5.95% only have high school or lower education background.

Among the total financial company employees, 15679 have overseas academic background, including 3805 from overseas undergraduate programs, 11677 from overseas master's programs, and 197 from overseas doctoral programs, accounting for 24.27%, 74.48%, and 1.26% respectively.

Professional Qualification

Professional qualification, or zhicheng in Chinese, is a personal management system for professional staffs in China, especially in the state-owned enterprises. There are three level of *zhicheng*: junior,

intermediate, and senior, which respectively equivalent to assistant teacher, lecturer and professor in universities. There are only about one fourth of the employees of financial companies in Shanghai who hold professional titles, of them 31641 are junior titles, 22742 are intermediate titles, and 2846 are senior titles.

Professional Certification

Professional certification, or zige zhengshu in Chinese, is a different but parallel evaluation system on the personal. Roughly, zhicheng is more relate to the company’s human resource department and the government, while professional certificate is more market oriented. A person could take several exams and holds several professional certification if passed, but he can only have one level of zhicheng, from lower to higher. There are many kinds of professional certification, for example CPA (Certificated Professional Accountants, of China), ACCA (Association of Chartered Certified Accountants, of UK), CGA (Certified General Accountant, of Canada), etc.

Of the financial employees in Shanghai, only 21673 or less than 10% of the total hold one or more professional certification. Of those certificated employees, 17416 have domestic certifications, with CPA, actuaries and financial planners the most popular one. There are 4257 employees (1.87% of total) who have international professional certifications, including IOA (UK), ACCA, CGA, CFA, and LOMA.

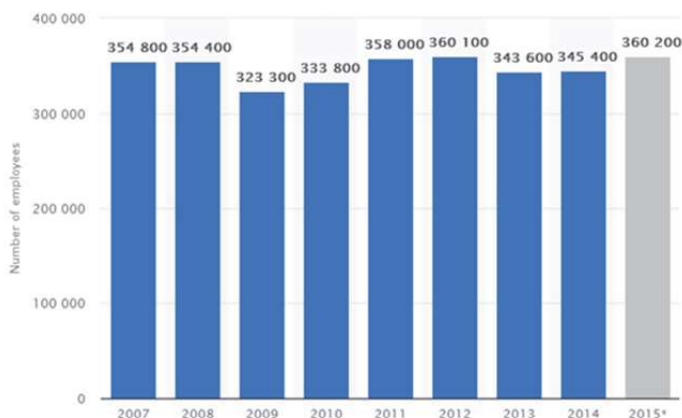
The Comparison of Shanghai and Other Leading Financial Centers in Human Capital

Since we cannot get the complete data on the financial talents of London, New York, Hong Kong or Singapore, the comparison in this section is more a descriptive analysis than a quantitative one.

Quantity of Financial Talent

Fig.2 depicts the number of employees in the financial services sector in London from 2007 to 2015 (first half). We can see the number is fluctuated around 350 thousand. The employees in financial services sector in New York is about 720 thousand, twice as large as that of London. If considering each city’s population, 24.484 million, 18.604 million and 10.434 million respectively, the ratio of financial talent in Shanghai’s population is 1.1%, that ratio in New York is 3.87%, and the ratio of London is 3.35%. This means the financial talent is relatively scare in Shanghai.

**FIGURE 2
NUMBER OF EMPLOYEES IN THE FINANCIAL SERVICES SECTOR IN LONDON**



Source: www.statista.com

Quality of Financial Talent

We do not have data to compare the education background or professional skills of the financial talents in different financial centers. If we use the value added per person as a proxy for quality of labor,

in 2015 Shanghai's GDP of financial sector was 416.27 billion (in RMB) with total employee of 350.7 thousand, while that of Hong Kong was 409.9 billion (in HK dollar) and 246.7 thousand. Therefore, the average GDP per financial employee in Shanghai in 2015 was 1.187 million yuan, while that of Hong Kong was 1.385 million yuan.

Another proxy of quality is the employment structure of financial talent. Generally, there is lower skill requirement on the employees in banking or insurance company than those in security, funds, or Futures Company. In June 2015, there was 72.8% of total employees working in bank or insurance in Shanghai, while only 10.8% in security, 2.7% in Funds and 2.1% in Futures.

CHALLENGE: TALENTS COMPETITION FOR SHANGHAI INTERNATIONAL FINANCIAL CENTER

Although there is no concrete data, we can reasonably estimate that the gap of financial talent between Shanghai and other top financial centers lies mainly in two aspects: advanced professional skills and higher international level. The number of total financial employees in Shanghai is almost the same as that of London and one third larger than that of Hong Kong. But there are much less employees in Shanghai who can design complex financial derivatives contracts to hedge risk, can provide tailored investment advice to high-net-worth individuals, or can "simply" speak fluently in English to service foreign customers from all over the world.

Shanghai is one of the hubs in China for financial talents with domestic education background, but its global attractiveness for those with overseas education or employ experience is quite limited. There was only 1835 foreign financial employees in Shanghai in 2015, less than 0.7% of the total. To be a truly international financial center comparable to New York or London, Shanghai must improve its ability to attract overseas financial talents. We analyze from four aspects:

Financial Environment

Since the 2008 global financial crisis, Shanghai government encourages financial companies enroll overseas talents, but the demands for them is decreasing in the latest years. The main reason for this paradox lies in that Shanghai's financial environment does not match well to the talents with overseas background. Shanghai's financial markets, although quite large in terms of transaction volume, are still quite close in their investors and rules. Most of Shanghai's financial companies, for example the local branches of the "big four" state-owned banks, are focused on their local business and do not have much responsibility on overseas business. There are only three large banks with their headquarters in Shanghai: the Bank of Communications, Shanghai Pudong Development Bank, and Bank of Shanghai. The company culture of those financial institutions is different with that of international institutions, which makes it more difficult for the overseas talent to accustom with the local environment.

Salary and Tax System

In 2016, the average salary of financial employees in Shanghai was 223339 RMB, while the median monthly income of financial and insurance wage in Hong Kong was 26000 HK\$, or about 260000 in RMB. Since average is usually bias with the extreme high values, it can be estimate that the median salary in Shanghai financial sector was lower than 223339, therefore much lower than that of Hong Kong.

While the salary in Shanghai for the comparable employee is no high than that in Hong Kong or other financial centers, the individual income tax in Shanghai is often higher than the tax of their. China currently use a seven-level individual income tax system. After a deduction of only 3500 yuan, the monthly salary can be tax as large as 45%. As an example, a financial employee with monthly salary of 60000 yuan in Shanghai would only get 548760 yuan each year after tax. If the same employee worked in Singapore, where the highest marginal tax rate only 22%, he would get nearly 600000 yuan after tax. The highest marginal tax rate in New York and London is smiler to that of Shanghai, at 48% and 45% respectively, but since they use the comprehensive individual income tax system, the family expense on

mortgage loans, children education etc. can be deduct before tax. This makes the actual income in New York or London higher than that in Shanghai for the same pre-tax salary.

Life Cost

It may seems strange to compare the life cost of a city in developing country with that in an advanced economy. From table 3 we can see, the life cost in Shanghai is the lowest in the six cities, with an index slightly higher than half of New York (as 100). But if considering the office rent of the financial district, Pudong of Shanghai was 119.5 in 2013, no much less than that of Manhattan, New York, which was 130.6, and much higher than that of Singapore (98.5).

**TABLE 3
HOUSEHOLD LIVING COST IN 2017**

	Living cost	Apartment rent	Living cost plus apartment rent	Grocery price	Restaurant price	Domestic buying power	Rank in 540 cities
Shanghai	56.16	41.95	49.3	61.7	40.74	66.16	339
London	88.69	76.67	82.89	67.36	96.36	92.61	42
Hong Kong	78.72	79.54	79.12	83.47	56.17	82.86	132
Tokyo	93.81	37.07	66.45	99.67	58.93	106.42	21
Singapore	91.4	71.89	81.99	83.64	64.4	95.89	29
New York	100	100	100	100	100	100	14

Source: Mercer's website

Notes: The cost of New York as 100.

There is a much-underestimated element for Shanghai's living cost in table 3: the house price. The rent cost of one apartment in Shanghai may be only one-half of that in New York, but the market price of Shanghai's house can be twice higher than New York.

Life Convenience

In terms of life convenience, overseas talents may not feel the same in Shanghai as in other financial centers. Foreigners are difficult to apply a work permit in Shanghai, and the border inspection is stricter than the free ports like Hong Kong or Singapore. Since Shanghai as well as China is a different legal and social environment to the western country, many overseas talents working in Shanghai leave their children at their homeland, which is an additional cost for them.

POLICY IMPLICATION: INCENTIVE APPROACH AND FOCUS

In order to compete for financial talents to build an excellent financial center, Shanghai can focus on the following aspects:

A More Opening Up Financial Environment

To attract financial talents from all over the world, Shanghai need a more open financial environment. The financial market should provide service for overseas investors as well as the domestic investors. This is not a simple task, since it will relate to the adjustment of law and institution, the supervision of markets, the liberalization of capital account, the internationalization of RMB, and so on. Many such policies are decided by the central government rather than a municipal government.

Although Shanghai municipal government cannot do much on the financial or law institution, it can make some policy innovation through the Shanghai Pilot Free Trade Zone. Launched on Sep.29, 2013,

the SPFTZ is more than a traditional “free trade area”, and more a trial zone for China’s new opening and reform strategy. It is a unilateral set of measures and procedures relating to a small area in Shanghai, which has promised liberalization on capital account and trade facilitation as its main objectives. The SPFTZ is a pilot zone for China’s new round of reform and opening out. The policy innovations such as Free Trade Account are a giant leap to capital liberalization.

An International Competitive Tax System

The top financial centers, for example London, New York, Tokyo and Singapore, have tax systems tilt for financial transaction and financial talents. In the 1980s, the corporate income tax in the UK was reduced from 52% to 35%. The 1990 Act for comprehensive budget coordination of America reduced the highest marginal tax rate for capital gain to 28%. To encourage security transactions, Japan allow the transaction loss of stocks be written off from the gain before taxed. In 2002, Singapore reformed its individual income tax from 14 levers to 10 levers, with the highest marginal rate from 30% to 26%. In order to attract the high net wealth individuals, Singapore abolished its inheritance tax in 2008.

China has a uniform financial tax system, but Shanghai can provide some tax refund to make its actual tax burden competitive to that of other financial centers. Currently China has a value added tax (VAT) of 6% on the core business of banking, securities, insurance and funds. According to the experience of other financial centers, Shanghai can classify the financial business into three kinds: core business, peripheral business, and export business. The tax rate on core business should be zero, on peripheral business can be standard, and on export business should be abated. As to the individual income tax, Shanghai can allow more deduction for the financial talents before tax, for example the spending on children’s education and mortgage loans.

Life Convenience

Shanghai published its financial talents development plan for the thirteenth Five Years period in 2016. In this development plan, Shanghai announced to provide more facilities for overseas financial talents in border inspection, custom clearing, residence and children’s schooling.

This plan includes a list that defines various categories of scarce talents. All financial talents are classified into five categories: middle or high management talents, research talents, business talents, professional service talents, and risk supervision talents. Each category includes several sub-categories, for example, business talents include fin-tech, funds manager, investment banking, actuarial insurance, shipping finance, off shore finance, network finance, etc. When an overseas talent be added into this list, he or she can enjoy the facilities on visa, work permit, hukou, schooling and hospital service as the plan provided. For example, those talents who has continuing worked four years in Shanghai and live in China no less than six months each year can apply for permanent residence. The talents and their spouse and children can attend Shanghai’s social insurance, medical insurance, and buy one apartment in Shanghai.

CONCLUDING REMARKS

Shanghai is already the financial center of China. With the forty years of high-speed development, China has become the second largest economy of the world, and has the potential to own a top international financial center. The internationalization of RMB also requires an on-shore financial for its international circulation. Shanghai has the ambition to be such an international financial center.

The dearth of financial talent will hamper Shanghai’s stride to financial center. Although Shanghai is the magnet for domestic financial talents, its international attractive is still limited. Some of the restriction are the macro environments, for example the legal system and culture tradition. But there are do some aspects that Shanghai can improve in the municipal level.

Shanghai can make its financial markets opening up to foreign investors, especially in its Free Trade Zone. It can also provide tax refunds to the talents and make their life in Shanghai more convenient.

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