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The Present State of Shanghai as an International Financial Centre

- A Comparison with London and Frankfurt -

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Abstract

This paper analyses the sufficient and necessary conditions to transform Shanghai from a merely domestic to an international financial centre. Background of the work is the increasing global importance of China as the powerhouse of the world economy particularly after the crisis and the decision of the State Council of China to turn Shanghai into an international financial centre by 2020.

The framework of the analysis is the classification and ranking of the descriptive categories clients, geographical reach, products, and value added chain, which are analysed and applied to Shanghai in comparison to the financial centres of London and Frankfurt. This leads to a gap analysis with certain recommendations.

In conclusion it can be argued that Shanghai is still a domestic financial centre. However, the rise towards an international one is also a matter of policy decisions of the central authorities in Beijing, particularly with regards to the international role of the RMB. Given this architecture, we distinguish between necessary and sufficient conditions transforming Shanghai into an international financial centre, where the former are connected to the overall policy framework whereas the latter, e.g. intellectual infrastructure, are mostly controlled by the Shanghai government.

Overall we come to the conclusion that Shanghai has the potential to become a world's acknowledged international financial centre by developing into an interregional financial centre for Asia, like Frankfurt for Europe, first and then growing towards an international one like London. This means that it is crucial for Shanghai to generate specific competitive advantages over Hong Kong and Singapore despite of the sheer size of China's economy.

Keywords: International Financial Centres, Global Financial Architecture, Shanghai

JEL classification: N20, N90, R11

I. Introduction

In a recent global survey 600 senior executives of global companies expect that Shanghai will develop into the world's second most significant financial centre following New York within the next ten years.[1] It was widely announced that the crisis had significantly changed the global economic structure in favour of the emerging economies, especially China and India. This is in line with the perception of the respective centres themselves. More than 90 percent of the business leaders in Shanghai and Mumbai, for example, were confident in their economic outlook for next year, but only 22 percent in London and 35 percent in New York were able to say the same.

Parallel to the tectonic shift of the post-crisis world economy in favour of the emerging economies particularly China, the State Council of China released in April 2009 the resolution "Promoting the Construction of Shanghai International Financial Centre and International Shipping Centre." This grants the Shanghai authorities more state-level support in developing the city into a significant international financial centre that draws on the strengths of the Chinese economy and the growing importance of the Renminbi internationally.

Both developments mark the background of the present paper. It intends to provide a first appraisal of the stage of development of Shanghai as a financial centre. In order to do so the methodology of a comparative analysis with London and Frankfurt as financial centres was chosen. The approach seems to be fruitful at least in two dimensions: Firstly, it allows a reality-oriented gap analysis for Shanghai, and secondly, it compares Shanghai to different styles of financial centres; London as an international and Frankfurt as an interregional centre. As a result a set of recommendations for the development path of Shanghai towards an international financial centre can be concluded.

The paper is organized as follows: After a short review of relevant research in section II, which justifies the framework of the present analysis, the evolution and performance of London and Frankfurt as international financial centres are introduced in section III. Section IV analyses the development of Shanghai based on the results for London and Frankfurt before section V develops necessary and sufficient conditions for Shanghai as an international financial centre. The paper concludes with a summary.

[1] See: Eversheds (2009)

II. Financial Centres in Theory

Neither a universally accepted definition of the term ‘international financial centre’ exists nor a theory or model that would describe the development and performance of an international financial centre in all its dimensions. Earlier studies are rather descriptive and offer a more holistic approach, combining various aspects of urban and regional economics, historic settings (development-paths) and underlying financial systems.[2] More recent studies offer quantitative models, which focus on indistinctly related aspects as the size of financial markets or indicators of certain activities.[3] We are using an older model of Tschoegl because it seems to be most appropriate for a comparative classification of financial centres, which is the focus of the present paper.[4]

Tschoegl defines a financial centre as primary markets where finance capital is collected, switched, disbursed and exchanged. His approach offers a classification of financial centres within different typologies, using the four dimensions: *(1) clients, (2) geographical reach, (3) products and (4) value-added chains.*

First dimension: clients. Clients are the base that populates the centre, such as governments, financial corporations, non-financial corporations, wealthy individuals, and retail customers. Clusters of domestic and foreign bank headquarters and headquarters of financial institutions are regarded as key factors. Additionally, the presence of the central bank, the fact if the centre is the capital of the country and if the city hosts an important port are decisive, as well as the number of listed companies at the respective stock markets.

Second dimension: geographic reach. Financial centres can be distinguished between domestic, regional, interregional and global centres. What distinguishes a purely domestic centre from a global centre is the origin of its clients. In line with an increasing level of internationalisation, the financial centre’s mobility provided to its customers becomes significant. The same is factual for communication of clients inside and outside the financial centre. Finally, the level and intensity of international promotion has an impact on the potential geographic reach.

The third dimension: products. The range of services that financial institutions provide classifies this dimension. This covers balance-sheet based activities to market making in foreign exchange and other financial instruments as well as insurance, securities, investment banking activities, and asset management. Scale and scope of products are mostly determined by the respective financial system – bank or market driven -, and the regulatory regime.

The fourth dimension: the value-added chain. In banking and financial services, one could distinguish between functional and booking centres. In a functional centre, bankers meet clients or trade in markets from that location, whereas booking centres provide a legal place of record for transactions that occurred elsewhere. Financial centres are highly complex marketplaces where buyers meet with and choose from service providers. In services people are decisive, so the talent pool and level of research are key factors as well. The value-added per employee is an important ratio of the financial centre’s superior efficiency.

[2] See, for example, Montes (1999), Laurenceson and Abhaya (n.d.) and Laurenceson and Tang (2005).
[3] See, for example, Leung, Cynthia; Unteroberdoerster, Olaf (2008), p.3.
[4] See: Tschoegl, Adrian (2000).

Table 1: Four Dimensions of a Financial Centre (Tschoegl, 2000)

	Clients	**Geographic Reach**	**Products**	**Value-added Chain**
Variables	- Central Bank - Capital of country - Headquarters of domestic banks - Regional headquarters of foreign banks - Branches and subsidiaries of foreign banks - Domestic listed companies - Foreign listed companies - Employees in financial services - Port	- Domestic/ regional/ interregional/ global financial centre - Offshore-/ onshore-centre - Mobility - Communication infrastructure - International promotion	- Regulation - Banks - Capital Markets	- Value-added per employee - Talent pool - Universities - Level of research

III. Different Styles of Financial Centres in London and Frankfurt

In the following these dimensions are used to provide the structural framework to compare London, Frankfurt and Shanghai. The basic idea is the hypothesis that the comparison of the respective development paths and resulting characteristics of London and Frankfurt as financial centres provide insights for Shanghai's future development into an international financial centre. To understand the differences between London and Frankfurt, it is first of all important to acknowledge that a financial centre is the result and component of the respective financial system.[5] The UK financial system is generally more driven by financial markets with a high level of concentration in the financial sector as well as a relative laxness of its regulatory environment.[6] Germany, on the other hand, is determined by a dominant position of intermediaries, such as banks, a medium level of regulation and state-owned banks.[7] In the following we start with an introduction on the historical development paths of the both centres. After that, we continue with an overview of the more recent developments of the respective financial centres, also in the light of the current financial crisis.

III.1. London's Development Path

> 'London's financial centre has two important roles – as the headquarters of the UK's domestic financial services industry and as a hub for international wholesale finance. It is the second role that makes London truly unique, creates the majority of the capital's financial services jobs and acts as a magnet for capital and talented people from around the world. The UK has the largest international capital flows of any country in the world. London and the UK enjoy global dominance of important financial products such as cross-border bank lending and foreign exchange turnover.[8]'

[5] See: Allan, Franklin; Gale, Douglas (2001), p.22.
[6] We refer to the pret-crisis environment.
[7] See: Loechel and Biswas (2001).
[8] See: Merrill Lynch (2008), p.8.

The London Stock Exchange was founded in 1802 and ‘the sophistication that the London capital markets developed as a result of (…) financial revolution allowed London to take over from Amsterdam as the major financial centre at the end of the eighteenth century.[9]’ Although the events of World War I resulted in New York replacing London as the major financial centre for the time being, London remained a dominant financial centre – in constant rivalry with New York for the world’s first position.. The very large number of foreign banks and the highly concentrated domestic banking system still determine the characteristics of UK’s financial system and London as the financial centre. The *Big Bang* of 1986 removed barriers to competition and helped the City of London to exploit the full potential of its historic specialization in banking and finance. During the *Big Bang* the barriers of foreign ownership in local institutions were removed, resulting in foreign takeovers of local banks. Foreign firms with more capital came into the market.[10] Additionally, a number of former building societies became commercial banks. The *Big Bang* is one factor that enhances London's international standing and attractiveness to foreign entrants. The regulatory regime is fairly liberal.[11]

Apart from the size and structure of the banking system, the UK financial system resembles the financial system of the US. Markets play a prominent role, but a lower level of regulation characterises the UK financial system. The City of London has traditionally been the major centre of banking and finance; the size of the foreign and domestic sectors is roughly equal. However, foreign banks are not heavily involved in the domestic sector, which is divided into commercial banking and investment banking.[12] Domestic banks provide a wide range of services to consumers and companies, such as insurance, travel services, real estate, and trust management. Regulations of their activities are comparably limited. Investment banks developed independently from commercial banks. Their main activities cover classical investment banking activities like underwriting, investment management, M&A services, and financial advisory. Another part of the UK banking system is determined by the building societies. These institutions historically provided mortgages, but were able to expand their business scope when regulation was relaxed. Insurance is provided by banks and insurance companies. The capital markets are very sophisticated. Besides the large number of domestic companies, many foreign firms are listed in London. ‘Bond and money markets are important. Markets for short-term instruments such as commercial bills, gilts, bank bills, and commercial paper are liquid. The Eurobond market is very liquid. (…) Exchange-based derivatives markets were established in the 1980s and have grown quickly. The foreign exchange market is the largest in the world, (…). London became the centre of the so-called Euromarket.’[13]

Many of London’s education institutions have a long established track record going back over a century. More than 14 percent of the students come from abroad, with China and India being the leading customers today. The education institutions provide a wide spectrum of relevant disciplines like banking, insurance, securities, accounting, legal services and others. Altogether, four main strengths can be identified that have underpinned London’s financial success during the last years: ‘1. A supportive tax, legal and regulatory context, 2. The capital’s attractiveness as a location for leading corporations and financial institutions, 3. Effective systems and support services, including technology, media and professional services, 4. A deep talent pool and welcoming culture.’[14]

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[9] See: Allan, Franklin; Gale, Douglas (2001), p.31.
[10] See: Economist (2008).
[11] See: Kuah, Adrian (2008), p.10.
[12] See: Allan, Franklin; Gale, Douglas (2001), p.59.
[13] See: Economist (2009a).
[14] Merrill Lynch (2008), p.6.

III.2 The Current Performance

> 'As a leading global financial centre, London has been deeply affected by the credit crunch, with some sectors including investment banks, hedge funds and securitization undergoing restructuring. A market downturn in business is being seen in most though not all financial markets. Despite volatility and loss of confidence financial markets in London have continued to function without interruption and the UK continues to have a leading share of global financial markets.[15]'

London has been hit hard by the financial crisis but also already started showing weaknesses beforehand. A recent study by *Merrill Lynch* points out that a group of competitor cities have been developing increasingly aggressive strategies to attract particular categories of business away from London. The current crisis has further exacerbated these threats and led to additional challenges. However, a number of happenings are putting London under pressure – independently of the current crisis. The historically supportive context of the City of London is challenged by increasing pan-European regulation, reducing London's ability to position itself as competitively as it could in a fragmented EU regulatory environment.[16] Other factors attacking London's position as the global financial centre are the shift of global wealth eastwards, local factors as the 'non-dom' levy, higher income taxes, transportation bottlenecks, increasing living costs and, despite the large number of education institutes, skills gaps. These problems are rather linked to London's own mismanagement than to external threats.

However, also external threats are on the rise. New York is regaining strengths in certain markets and a number of regional and national centres are targeting different niches of London's business. Also the efforts of cities from emerging economies like Dubai, Mumbai, and Shanghai promote their individual development are showing results.[17] The intense competition from other centres explores another weakness of London. An array of public and private bodies is working on the task of promoting London as a financial centre. However, a single well-organized body is expected to be more efficient than eight groups working parallel on similar issues. An additional threat is the tendency of foreign banks to refocus their operations on their domestic markets. Bank collapses including Northern Rock, Lehmann and the Icelandic Bank have further weakened London's position. The current tendency towards a higher level of regulation, above the current one of the EU, could further undermine London's previous strengths. One example is the recent introduction of a special tax for bank bonuses.[18]

III.3 The Four Dimensions of London

Using the Tschoegl's four dimensions introduced in chapter one, London is positioned as follows:

First dimension: clients. London is the location of the Bank of England and the political capital of the UK. The headquarters of most domestic banks are located in the city. London is the number one position for foreign banks to set up regional headquarters in Europe. In 2008, 250 branches and subsidiaries of foreign banks were located in the city, a third from the Euro area. Foreign banks manage about 50 per cent of the banking assets in the UK. Around half of the European investment banking activity is concentrated in London. [19] London has a higher number of foreign listed companies than any other stock exchange in the world. In 2007,

[15] See: International Financial Services London (2009).
[16] See: Merrill Lynch (2008), p.7.
[17] See: Eversheds (2009)
[18] See: Economist (2009b)
[19] See: International Financial Services London (2009).

300,000 employees worked in financial services in Greater London, which is about 43 per cent of total employment. Furthermore, London has an internationally relevant port. These findings clearly underline the high accumulation-level of important clients in the financial centre of London.

Second dimension: geographic reach. London is a global financial centre that shows characteristics of an offshore financial centre, since the main share of its financial service activity is not directly linked to the domestic economy of the UK. Much more, the city serves a function as a global gateway to continental Europe. The provided mobility, including factors like airports, traffic and hotels is comparable high and fulfill the necessary conditions of a global financial centre. Heathrow airport is one of the most important transportation hubs in Europe. Furthermore the communicational infrastructure is well developed and provides a sound base for the needs of the financial industry.[20] However, London is loosing some business to niche-centre's which attack the city's financial centre with aggressive and well coordinated international promotion campaigns. London's international promotion is fragmented among a number of bodies and therefore lacks to promote the full potential of the city.[21] Nevertheless, the geographic reach of London clearly has a global dimension.

The third dimension: products. London historically enjoys a comparatively low level of regulation. However, as a result of increasing pan-European regulation and a generally higher level of regulation as result of the financial crisis London will find it harder to position it as competitively as before. In the future, this can result in a limited number of financial products offered in the financial centre. Despite these prospective changes, London's capital markets offer a broad range of financial products, with a very strong position of stock markets. In derivative trading, London is the biggest market in the world, with 43 per cent of global turnover. The city is also the biggest foreign exchange market in the world, accumulating 35 per cent of the global turnover, more than New York and Tokyo combined.[22] London is one of the leading centres for foreign equity trading and international IPOs. Because of the high concentration of commercial and investment banks, London also offers a broad range of banking and investment banking related products. Furthermore, London is the world's largest international insurance and reinsurance market, with a gross premium income of 40 billion USD in 2007. The net premium income of the UK insurance industry was 433 billion USD in 2007. Altogether, London offers a very sophisticated and broad set of all kinds of products and services. Therefore the classification of London in this dimension is 'high'.

The fourth dimension: the value-added chain. The value added per employee is 50 per cent higher than the UK's average in financial services. This underlines the high value added in the financial centre because of a high level of concentration. A big number of top universities like the *London School of Economics* or the *London Business School* offer specialised education in relevant fields and executes related research. The city serves as a career platform for employees from all over the world. Therefore, the financial centres talent pool is comparatively large, with a share of 14 per cent of students coming from abroad.[23] Despite this potential, also London shows some shortages in specialised labor. Nevertheless, the value-added in the financial centre is high.

[20] See: A.T. Kearney (2008).
[21] See: Merrill Lynch (2008), p.22.
[22] See: International Financial Services London (2009): Key facts about the city of London.
[23] See: International Financial Services London (2008): Financial Services Education & Training 2008.

III.4 Frankfurt's Development Path

The financial development in Germany was strongly driven by family-dominated private banks and later on by Dresdner Bank, Commerzbank of Hamburg and Deutsche Bank of Berlin. Links between the industry and financial institutes developed quite substantially. Considerable disruption was caused at the end of World War II when the allies attempted to break up the large German banks, admittedly unsuccessful. This could be linked to the fact that destroyed nations do not need capital from financial markets immediately[24] and banks are more suited to allocate capital to the low-risk task[25] of reconstruction. After World War II another event was taking place, and the isolation of Berlin caused a shift of the financial centre to Frankfurt. Therefore, Frankfurt's development as a financial centre is a quite special case. The city has not constantly been the predominant centre in Germany - after 1870 Berlin took over that role in Germany.[26] However, with the steady threat of a Russian invasion Berlin could not continue to play this role. The final reason for Frankfurt's emergence as Germany's primary financial centre is closely linked to the establishment of the predecessor (*Bank Deutscher Länder*) of the *Bundesbank* (German central bank) close to the American military headquarters. As a result, the German privately owned banks and most foreign banks settled in Frankfurt. Frankfurt also proved to remain resistant to changes after the reunification of Germany. The final decision to set up the European Central Bank in Frankfurt underlined the financial centre's importance for the European region and the Euro area.

Nowadays Germany is a bank-based system, meaning that for the funding of the economy banks are much more important than markets. The banks themselves are universal banks and can be differentiated into three groups. The biggest group in terms of assets are savings banks which together with the connected Federal State Banks ('Landesbanken') share about 35 percent of the overall bank assets, followed by the big private banks like Deutsche and Commerzbank with a share of 30 percent, and the so-called co-operative sector with around 12 percent of domestic banks assets; the others are specialised institutions. It is notable that the savings and Federal State banks are state-owned, and the co-operative banks are also not private in the sense of public listing, which means that roughly only one third of German banking sector is private.

Banks are dominant not only in their classical business sector, but also in other non-bank financial businesses such as security houses, investment banking, mutual funds and insurance companies. German companies heavily rely on banks for their long-term financing. Banks are also more strongly represented due to composition of voting rights, blocks of shares and seats on supervisory boards. By the end of the 1970s, Frankfurt accumulated two-thirds of all foreign banks branches and subsidiaries in Germany. The number of foreign banks in Germany rose from 40 in 1973 to 140 in 2000. However, the share of Frankfurt in comparison to the whole German market remained stable. With a decreasing number of global banks since the mid-1990s, in the year 2006 the share of international banks in Frankfurt dropped below 60 percent for the first time since 1973.

Also the German stock exchange did undergo internationalisation, in line with an increased cooperation with a number of other stock exchanges. These attempts were undertaken by the German stock exchange after the transformation from a passive marketplace into a financial player. Several unsuccessful attempts to merge with the London Stock Exchange and Euronext, as well as the successful takeover of the International Securities Exchange in New

[24] See: Grote; Michael (2008), p.244.
[25] See: Allan, Franklin; Gale, Douglas (2001), p.422.
[26] See: Grote; Michael (2008), p.239.

York in 2007 had the goal to establish a large pan-European stock and derivate exchange. The success of the German Stock Exchange's internationalisation strategy is reflected in the shareholder structure, with 82 percent foreign shareholders in 2008.[27]

As mentioned earlier, the final decision to set up the European Central Bank in Frankfurt underlined the centre's importance for the European region and the Euro-area. On the other hand, the European Central Bank replaced many of the functions the *Deutsche Bundesbank* had related to the former German currency, the *Deutsche Mark*. Nevertheless, the set up of the European Central Bank fostered Euro based trading in Frankfurt.[28]

III.5 The Current Performance

> 'The worldwide financial crisis has thus, not without leaving its traces, passed the Rhine-Main financial centre. While, for example, the performance of the financial sector has caved in dramatically (…), the general economic and political-institutional general framework has proven robust. In 2008, the level of internationalization of the financial centre has also slightly risen. The level of the banking system's stability (…) has proven astonishingly robust. This remarkable evidence for the robustness of the Frankfurt financial centre mainly owes to the easing of monetary policy by the European Central Bank as well as the initiatives and programs of the federal and regional governments.[29]'

Frankfurt has been hit less hard than other financial centres and might gain relative strengths during the crisis. A recent study by *Helaba* points out that Frankfurt is affected by the financial crisis to a lesser extent than London. This is linked to several facts, for example the strong position of the Euro, the location of the European Central Bank in Frankfurt, the focus of classical loan business of German banks and the universal-banking system in general. Because of a growing importance of strong ties to the real economy, the size of the German economy becomes more relevant. These facts and the improved marketing and service activities of *Frankfurt Main Finance* (a newly set up inclusive marketing institution of the financial centre Frankfurt), Frankfurt is expected to become more important among the European financial centres.[30]

Also the financial centre Frankfurt recently showed some development that is not linked to the crisis. Virtualisation had the effect that the Frankfurt trading floor only contributed 4.6 percent of all German trading in 2008, down from 32.4 percent in 1999. This development is linked to the fact that on account of the installation of computer-based trading, settlement and payment systems with remote access it became obsolete to represent close to the major stock exchanges. These reductions of transportation costs made an interaction from a distance, like from London, possible. A number of banks are coordinating their activities from their regional headquarters, which mostly is London for the European region. The turnover of the German stock exchange is by more than 50 percent driven by participants from outside Germany, most of them are located in London.[31]

Nevertheless, more than 90 percent of all German stock exchange volumes are traded in Frankfurt.[32] With a turnover of 1.6 billion USD, the German Stock Exchange is number seven in the world. However, Deutsche Börse's trading activities primarily focus on German firms. This is in line with the fact that from 2001 till 2008 only seven foreign firms listed at

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[27] See: Engelen, Ewald; Grote, Michael (2009), p.9.
[28] See: Falconbridge, James (2004), p.16.
[29] See: Börsen-Zeitung (2009).
[30] See: Traud, Gertrud (2009), p.7.
[31] See: Grote; Michael (2008),, p.245.
[32] See: Frankfurt Main Finance (2009).

Deutsche Börse, compared to 145 German firms during the same period. This implies that only 4.8 per cent of the IPOs during that time-period had an international background. Some of these companies were only legally incorporated in Germany, but having the headquarters elsewhere. Besides, most of them did not even raise capital in the German market. Another recent development is the relocation and re-regionalization of foreign banks in Germany. A number of foreign banks left Frankfurt and moved to the cities that are not known as financial centres at all. Therefore, the number of finance related jobs in Frankfurt decreased.

III.5 The Four Dimensions of Frankfurt

First dimension: clients. Frankfurt is the location of the European Central Bank and the *Bundesbank,* but not the political capital of Germany. The headquarters of most domestic banks are located in the city. Frankfurt is an important city for foreign banks to set up regional headquarters in continental Europe. In 2008, 140 branches and subsidiaries of foreign banks were located in the city. These banks come from 36 different nations, while the main share is from UK and France.[33] Frankfurt accumulates two-thirds of all foreign banks branches and subsidiaries in Germany. The primary stock markets show a low level of internationalisation, with only seven international firms going public between 2001 and 2008, 4.8 per cent of all IPOs in this timeframe.[34] The German stock exchange, Deutsche Börse, located in Frankfurt is the second largest in Europe and number seven in the world in terms of turnover.[35] 90 per cent of German stocks are traded in Frankfurt. Over the last years, Deutsche Börse has developed multiple linkages with a number of other European stock exchanges. In 2007, about 75,000 people worked in the finance industry in Frankfurt, about 37 per cent of total employment in Frankfurt. These findings state the medium to high accumulation-level of important clients in the financial centre of Frankfurt.

Second dimension: geographic reach. Frankfurt is an interregional financial centre, with strong linkages to other regional financial centres in continental Europe. The city shows characteristics of an onshore financial centre. Frankfurt's financial services generally show strong ties to the real economy and especially to the German domestic economy. The level of mobility, including factors like airports, traffic and hotels is high and clearly fulfills the conditions of a regional financial centre. Frankfurt airport is one of the most important transportation hubs in continental Europe. Furthermore, the communicational infrastructure is well-developed and provides a sound base for the needs of the financial industry.[36] Therefore, a quite substantial percentage of trade takes place from outside the financial centre. Due to its stability-oriented position, Frankfurt is rather gaining from the financial crisis in relative terms, since clients are searching safety in turbulent times. Promotion and reputation building is managed by *Frankfurt Main Finance*, which is run by the federal state of Hessen, together with the City of Frankfurt and other important financial institutions. The task of the institution is the promotion of Frankfurt as a financial centre on a national and international level. The geographic reach of Frankfurt clearly has an interregional dimension.

The third dimension: products. Frankfurt is determined by a medium level of regulation that develops in line with increasing pan-European regulation. Contrary to London, Frankfurt is gaining from the trend of higher regulation in the aftermath of the financial crisis. Due to a

[33] See: Traud, Gertrud (2009), p.7.
[34] See: Engelen, Ewald; Grote, Michael (2009), p.9.
[35] See: Frankfurt Main Finance (2009).
[36] See: A.T. Kearney (2008).

different financial institutional setting, Frankfurt provides a different set of products. The domestic banks are universal banks combining classical commercial with investment banking, including securities and mutual funds. This set-up and the focus on classical loan business of German banks proved to provide more stability than too specialised banks can guarantee. 'The level of the banking system's stability, measured by the deposits of non-bank clients as well as the estimated 'probability of survival' of Frankfurt banks during the financial crises, has proven astonishingly robust.[37]' The ratio of outstanding commercial bank loans to debt and equity markets is significantly higher than in the UK, while the level of securitization and private equity is much lower. More than 90 per cent of all German stock exchange volumes are traded in Frankfurt.[38] With a turnover of 1.6 billion USD, the German Stock Exchange ranks seventh in the world. However, the primary markets show much lesser levels of internationalisation, only 4.8 per cent of the IPOs between 2001 and 2008 had an international dimension.[39] On the whole Frankfurt offers a well-developed set of products. However, the scale is more developed in the classical banking services than in securitization. While this helps the financial centre to maintain a higher degree of stability, it leads to a lower diversification of products than London can offer. Therefore, the dimension 'products' is classified as medium to high.

The fourth dimension: the value-added chain. The value added per employee is 50 per cent higher than Germany's average in financial services.[40] This underlines the high value added in the financial centre because of a high level of concentration. A number of specialised universities and financial research institutions are located in the city. Most prominent are the *Frankfurt School of Finance & Management* and the *House of Finance* of *Goethe University*. Frankfurt's financial industry is clearly connected to the talent pool and high level of research. The value-added in the financial centre Frankfurt is high.

III.6 Summary: Different Styles but Complementary Functions

As a result, London as part of the Anglo-Saxon financial system has been hit harder by the recent financial crisis than Frankfurt. The foreseeable reshape of the global financial landscape after the crisis seems to be beneficial for Frankfurt, too. Moreover, the increasing level of supra-national regulation, fostered by the European Central Bank and other European institution is diminishing London's traditional competitive edge. Last but not least, the shift from 'capital market centric' to 'client centric' sentiment in the financial industry could further boost Frankfurt's position in the future. The financial crisis affects the financial centres London and Frankfurt in different ways. Since London is more deregulated than Frankfurt, the volatility is higher and the current performance is suffering to a greater extent. Frankfurt, on the other hand, is affected by the crisis to a lesser extend. Traditionally more regulated, the volatility is lower – the chance is in fact interpreted as a chance to catch up with other competing financial centres. Another factor seems to be quite beneficial for Frankfurt. The increasing level of supra-national regulation, fostered by the European Central Bank and other European institutions, is a step in Frankfurt's direction. As the host city of the European Central Bank, Frankfurt could indeed leave the financial crisis with a comparatively stronger position than it entered it. The other way around, a higher level of supra-national regulation would diminish London's traditional advantage as a financial centre with a low level of regulation and supervision.

[37] See: Börsen-Zeitung (2009).
[38] See: Frankfurt Main Finance (2009).
[39] See: Engelen, Ewald; Grote, Michael (2009), p.9.
[40] See: Traud, Gertrud (2009), p.7.

Nevertheless, London is and will stay the dominant financial centre in Europe and the only truly global one in the region. The individual characteristics of the two financial centres are also too different that one could replace the other. Quite the opposite, the two financial centres should be regarded as complementary to each other. London has many characteristics of a global offshore centre and global gateway to Europe's financial markets, while Frankfurt is a clearly interregional financial centre with a dominant position on the European continent.

IV. The Development of Shanghai as an International Financial Centre

> 'The major European and US markets are reshuffling after the crisis and it has created a good opportunity for Shanghai to lay a sound basis and infrastructure for rising as an international financial centre.[41]'

As stated by Steffens, emerging economies should not simply imitate the complete structure of existing financial systems, but choose the proper components to create an appropriate financial- system and centre.[42] It will be crucial for the development of the financial centre Shanghai to identify the right factors and design a balanced mixture of performance drivers and stability factors. While the differences in national regulation increasingly diminish as a consequence of a greater level of supra-national regulation, which should also present a guideline for Shanghai, the way to reach the new goals should be the correct one for Shanghai and can indeed show some unique features.

In order to provide the essential analysis of the historical and institutional context which is formative for Shanghai's financial centre, we investigate Shanghai's economic development path before and after the planned economy, analyse the mid-term development of China's financial system and finally provide recent information on the topic – classified according the four dimensions introduced in chapter two.

IV.1 Shanghai's Development Path

> 'The British-owned bank, The Oriental Banking Corporation, was the first to arrive: it set up a branch in Hong Kong in 1845 and an office in Shanghai in 1847. The Hongkong and Shanghai Banking Corporation (now the multinational giant HSBC Holdings) was founded with its head office in Hong Kong in 1864. It opened for business in 1865, and established an office in Shanghai in the same year. Other British, European, American and Japanese banks then followed. Modern Chinese banks also began to appear towards the end of the 19th century. The first modern Chinese bank, the Commercial Bank of China, was established in 1897 with its head office in Shanghai. The first stock exchange was formed in Hong Kong in 1891 and in Shanghai in 1904. Insurance companies also began to appear in both cities from the middle of the 19th century onwards.[43]'

By 1936, 47 foreign banks were set up in Shanghai. 33 came from the UK, the US and Europe, four came from Hong Kong, three from Singapore and Malaysia, one from the Philippines. In the same year, all 164 domestic banks, among them the former central bank, Bank of China, the Bank of Communications, the Farmers Bank, the Central Trust, the Postal Remittances and Savings Bank, had their headquarters in Shanghai. Furthermore, 72 regional banks were located in Shanghai. Altogether, these banks accounted for 40 per cent of the nation's total bank deposits. Additional to the high concentration of banks, Shanghai was also host to modern financial markets: 'securities market, gold market, foreign exchange market, silver

[41] See: Xinhua (2009).
[42] See: Steffens, Udo (2009).
[43] Jao, Y.C. (2003), p.7.

bullion market, internal remittances market, and inter-bank market[44]' Furthermore, Shanghai was home to 166 foreign and 48 domestic insurance companies. Hence, before World War II Shanghai was not only China's domestic financial centre but a regional centre as well.

However, the Sino-Japanese War, World War II and the new economic and political patterns of the P.R. China founded in 1949 brought an end to the financial centre Shanghai. Eventually the whole financial system of China was reduced to a mono bank system with Shanghai only playing a minor role. Due to the P.R. China's characteristics of a planned economy, where money mostly functions as an accounting unit in order to ease planning and allocation of resources between various actors in the economy, the financial sector just restarted developing after the new policy of reform and opening up was introduced by Deng Xiaoping in 1978.[45] Since then, various reforms and modification took place and reshaped the emerging financial sector again and again. Till date, the financial sector is heavily banking dominated with a separate banking, security, and insurance sector.[46]

In 1984 the Chinese central bank, the People's Bank of China, became separated from the ministry of Finance and exclusively realigned into sovereign functions afterwards. Later on the three regulatory authorities Chinese Securities Regulatory Commission, Chinese Banking Regulatory Commission and Chinese Insurance Regulatory Commission have been founded.[47] During the following years, a number of state-owned banks with different purposes were established. Today the banking sector is differentiated, but the so called 'big five" state-owned banks, which are partly privatized still dominate. Additionally, a number of private joint stock banks, City Commercial Banks, Credit Cooperatives as well as and insurance und securities companies appeared during the last decades. Due to China's entry into WTO, foreign banks were also allowed to operate in China. Furthermore, foreign banks can become shareholders of Chinese banks with a maximum of 20 per cent per institute and a maximum of 25 per cent of the total foreign ownership.[48] Compared to other banks, the Chinese banks have a comparably high liquidity. The capital adequacy ratio was around 8.4 per cent in 2007, which is slightly more than the Basel-standard of 8 per cent.[49]

The development of capital markets began in the early 1990s with the emission of the first governmental bonds. The stock exchange in Shanghai and Shenzhen were founded in 1990 and 1991. The enacting of the securities law in 1993 marked an important step of formalization and legal enforcement of the capital market. The stock markets are segmented in A-shares (denominated in RMB) for domestic and qualified foreign institutional investors, B-shares[50] (denominated in USD/HKD) for foreign investors, H-shares (denominated in HKD) for IPOs in Hong Kong, N-shares (denominated in USD) for IPOs in New York, L-shares (denominated in GBP) for IPOs in London, S-shares (denominated in SGD) for IPOs in Singapore and Red Chips (denominated in HKD) for Chinese companies not having the headquarter on mainland China, but listed in Hong Kong. Since 2002 qualified foreign institutional investors are allowed to trade A-shares, bonds and other instruments in the Chinese markets. Until the end of 2007, 52 foreign companies were registered, 49 of them with an investment quota of 9.995 billion USD. The pendants to the qualified foreign institutional investors are the qualified domestic institutional investors that, since 2006, have

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[44] Jao, Y.C. (2003), p.8.
[45] See: Wu (2005).
[46] For a detailed analysis of recent developments of China's banking sector see Loechel and Li (2009), Loechel and Zhao (2006) as well as Zhu, Min/Cai,Jinqing/Avery, Marha (2009).
[47] See: Dyck, Steffan et. Al.. (2009), p.8.
[48] See: Loechel (2006).
[49] See: Dyck, Steffan et. al. (2009),, p.13.
[50] See: Klenner, Wolfgang (2006), p. 55.

had the right to collect domestic funds and invest abroad. By the end of 2007, 15 fond-companies and five security companies got the qualified institutional domestic investor status. Their total investment quota is 24.5 billion USD.

Before April 2005, only 33.3 per cent of the listed shares were tradable. The remaining 66.6 per cent were owned by the government or state-owned companies. Reforms starting in April 2005 were supposed to gradually eliminate the difference between tradable and non-tradable shares. In order to keep prices stable a supply-shock should be prevented. Until 2007 1,300 listed companies – representing 98 per cent of the total market capitalization – initiated or even finished this reform process. Nevertheless, the number of free-float shares, traded in the secondary market, remains low. Until 2007 less than 30 per cent of all shares were not constant ownership. Institutional investors covered only 30 per cent of the total market capitalization. In 2007, 52.7 per cent of their assets were hold by investment funds, followed by pension funds that covered around 40 per cent of their assets. This current composition is rather unusual, since pension funds or insurance companies usually play a more prominent role in other markets. The bulk of tradable shares is hold and traded by individual investors. Since these investors are more often driven by short time motives and tend to follow emotion-driven herd-behavior investment patterns, this brings a high degree of volatility into the Chinese stock markets.

IV.2 The current Performance

Especially the Shanghai Stock Exchange determines Shanghai's current role as financial centre. The total market capitalization of the Shanghai and Shenzhen stock markets came second in Asia, following Japan, in 2007. Turnover on the Shanghai Stock Exchange alone was the second largest in the Asia-Pacific Region and seventh largest in the world in 2008.[51] In the same year the 35 biggest IPOs were supposed to be launched at the Shanghai Stock Exchange, with a total volume of 60.5 billion USD and 94.5 per cent of the total annual IPO volume. This underlines the prominent position of the Shanghai Stock Exchange in Mainland China. The current credit expansion in combination with China's huge stimulus package of 4 trillion RMB are once again increasing bank lending massively. In turn, it is estimated that around 20% of the new credits has gone into stock and real-estate markets instead of the real economy.'[52] In line with a number of major IPOs in 2009, like China State Construction Engineering (world's largest IPO in a year) and Sichuan Express, the Shanghai Composite Index has inclined 88.5 per cent since the beginning of this year, beating all major indices around the world.[53] By the end of 2007 the market capitalization of the Shanghai Stock Exchange, with 860 companies listed, was around 18,596.71 billion USD, with an average daily turnover of 289.02 billion USD. In the end of 2008, the market capitalization of 864 listed companies was 1,424.39 billion USD. Despite the high volumes, the sharp dropdown also indicates the volatility in the market.

In 2008, bonds of the People's Bank of China and treasury bonds dominated 75 per cent of the Chinese bond market. 70 per cent of all company bonds were dominated by state-owned enterprises. The total volume in 2008 was around 1.04 billion USD 60 percent of the bonds are traded by Chinese commercial banks, followed by insurance companies. In the future the share of the latter is expected to rise, also in connection with the higher demand for life insurance products.[54]

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51 See: European Chamber (2009), p. 539
52 Wall Street Journal (2009).
53 See: Financial Times (2009a).
54 See: Dyck, Steffan et. al) (2009), p.8.

At the Shanghai Stock Exchange several investment instruments are available, including A- and B-shares, convertibles, options, closed investment funds, ETFs, company- and treasury bonds as well as repos. Also derivatives, primarily commodity-futures, are available. In 2007 this market had a turnover of 5.86 billion USD. In 2006 foreign portfolio investment reached a peak of 43 billion USD, falling back to 21 billion USD in 2007. 'On average, foreign portfolio investments in China have increased by 51 per cent annually over the past five years, reflecting the strong demand for securities from the country. At the same time, annual inflows amount to only 1.5 per cent of total gross fixed capital formation in the country, and 0.7 per cent of total portfolio investments globally.[55]'

Despite its enormous growth and development during the recent years the Chinese financial markets are still among the most isolated on a global level. One reason is the non-convertibility of the RMB, which's exchange rate is determined by a currency basket and a managed float exchange rate. However, the Chinese government is gradually expending the scope of international RMB business.[56] Moreover, despite of regulator hurdles the sheer size of China's financial markets is continuously attracting foreign investors. Already today China's stock markets, for example, have a share of 5.9 per cent of the global markets and the banking sector dominates 10 per cent of the global markets. Based on growth rates during the years 2003 and 2005, China's financial markets are expected to reach a share of 13 per cent in global bond markets, 40 per cent in global stock markets and 18 per cent in global banking markets in the long run until 2018.[57]

IV.3 The four Dimensions of Shanghai

Using the Tschoegl's four dimensions introduced in chapter one, Shanghai is positioned as follows:

First dimension: clients. Shanghai is neither the location of the *People's Bank of China*, nor the political capital of China. Shanghai accumulates a small number of domestic banks' headquarters and a larger number of China headquarters of foreign banks. Because of the close ties to policy makers, regulators and the central bank, Beijing is often preferred to Shanghai as the location of headquarters. However, an increasing number of financial institutions like regulators and the central bank established subsidiaries in Shanghai. This represents Shanghai's increasingly important position in the domestic market. In line with more recent trends, also a number of companies started to relocate their business development units to Shanghai, while keeping the administrative units in Beijing. In 2008, altogether 689 financial institutions were located in Shanghai. Among them, 165 foreign invested financial institutions were operating in Shanghai, making 24 per cent of all financial institutes. Other sources are stating numbers of 395 foreign financial institutions, which makes the concentration of foreign financial institutes the highest throughout China. Nevertheless, even in Shanghai the share of foreign assets on all bank assets is still fewer than 10 per cent but significantly higher than the 2.4 percent in the entire country. As already pointed out, the flagship of Shanghai as a financial centre is the Shanghai Stock Exchange. To conclude, Shanghai has a considerably high density of financial institutes, but the most influential ones, like the central bank, the regulators and the headquarters of the big five and most foreign banks are located in Beijing. Therefore, the accumulation of financial institutes can be classified as medium.

[55] Dyck, Steffan et. al. (2009), p.19.
[56] See: Loechel (2009).
[57] See: Dyck, Steffan et. al. (2009), p.24.

Second dimension: geographic reach. Due to its current customer structure Shanghai is mainly a domestic financial centre. Despite its enormous growth and development during recent years, China's and Shanghai's financial markets are still relatively isolated on a global level mainly due to the non- convertibility of the RMB. The city still shows characteristics of an on-shore financial centre, primarily serving Chinese companies for IPOs. In principle, Shanghai's financial services generally show strong ties to the real economy, especially to the Chinese domestic economy. The level of mobility, including factors like airports, local traffic and hotels is moderate to high and fulfills the necessary conditions of a domestic financial centre. The Shanghai airports are among the most important transportation hubs in Asia. The communicational infrastructure is developed and provides a reasonable base for the needs of the financial industry. One has to acknowledge Shanghai's extraordinary fast development speed. The Expo, taking place in Shanghai in 2010, is expected to further boost the level of mobility in the city, especially from the airports to the city centre, and the connectivity to other international hubs. The communicational and IT infrastructure is moderately to highly developed and provides a satisfying base for the needs of the financial industry. However, due to fast development and steadily improvements Shanghai can reach standards of international established centres like London and Frankfurt within few years. Given the current situation the geographic reach of Shanghai should be still classified as domestic, and therefore low.

The third dimension: products. As already pointed out, China's financial system is still mainly bank-based, which is the case for the products as well. In 2006, bank loans accumulated 84.9 per cent of total external financing, followed by bonds of 10.1 per cent, shares 3.9 per cent, and asset backed securities of 1.1 per cent. Nevertheless, at the Shanghai Stock Exchange a certain range of investment instruments are available, including shares, convertibles, options, closed-ended funds, ETFs, company and treasury bonds as well as repos. Also derivatives, primarily commodity-futures, are available. 'The Shanghai Gold Exchange became the world's largest gold spot market in 2008.[58]' The bond market is still dominated by treasury and central bank's bonds, whereas 70 per cent of all company bonds are dominated by state-owned enterprises. Due to the dominance of commercial banking business the dimension 'products' is classified as still low to medium for Shanghai.

The fourth dimension: the value-added chain. Around 200,000 people work in the financial industry, about 3.4 per cent of total employment in Shanghai. Shanghai's GDP growth is mainly boosted by the service industry, with a growth rate in output of 14.2 per cent. In terms of financial education, Shanghai already developed a number of renowned institutes and universities which focus on the relevant fields of education, such as the *China Europe International Business School (CEIBS), Fudan University, Shanghai University of Finance and Economics (SUFE),* and the newly founded *Shanghai Advanced Financial Institute* located at *Jiao Tong University* funded by the Shanghai government with 320 million RMB. Also foreign universities are active in the field of financial education in Shanghai. As a shareholder of the *Shanghai International Banking and Finance Institute (SIBFI),* an education joint venture with *SUFE,* and as a partner of the *German Centre of Banking and Finance* at *CEIBS, Frankfurt School of Finance & Management,* for example, supports the development of Shanghai into an international financial centre. However, the shortage of qualified employees is still one of the most severe constraints in recruiting and retaining staff in the finance industry of Shanghai, accompanied by high salary expectations and language barriers. Compared to the size of the city and the ambitious aspirations, the educational

[58] See: European Chamber of Commerce (2009): p. 539.

infrastructure in finance and related fields is despite of all efforts still comparable low. This is particularly the case for professional training and executive education. The transformation into an international centre has to overcome this bottleneck by recruiting and retaining domestic and foreign financial talents as well as hands-on education and training for professionals of the finance industry. By offering incentives to international financial talents, Shanghai tries to encourage brain-gain effects. The value-added of Shanghai as a financial centre is therefore classified still as low to medium.

Overall the classification according to Tschoegl's four dimensions makes clear that the financial centre Shanghai is still mainly a domestic especially in terms of geographic reach (see the following table). While the other dimensions show reasonable levels of development, it seems to be appropriate expanding the geographic reach and the underlying factors gradually. One way could be the development first towards an interregional centre for Asia like Frankfurt for Europe. Based on that, the city could develop later into a global relevance like London and New York. Within the first step the features of Frankfurt could be an orientation for Shanghai. Especially an easing of regulation from a comparatively high level to a medium level is essential, combined with strong international marketing and reputation building. In line with Frankfurt's development path, the attraction of more financial authorities can be promoted. During the second phase, London provides insights how to become a global financial centre. Especially the development its financial markets can accelerate Shanghai's global importance.

Table 2: Four Dimensions of the Financial Centres London, Frankfurt and Shanghai

	London	Frankfurt	Shanghai
Clients	- Bank of England located in London - Capital of UK - Headquarters of domestic banks - Number one position for international banks European headquarters - Branches and subsidiaries of foreign banks: 250 (in 2008); - 50% of European investment banking activity is concentrated in London - Higher number of foreign listed companies than any other stock exchange in the world - Employees in financial services: 300,000 in Greater London (in 2007), 43% of total employment - International port city *→ **Evaluation: high***	- Bundesbank located in Frankfurt - European Central Bank located in Frankfurt - Frankfurt is not the capital - Headquarters of domestic banks - Branches and subsidiaries of foreign banks: 140 (in 2008) - Regulators (European/domestic) partly located in Frankfurt - Employees in financial services: 75,000 in Frankfurt (in 2007), 37% of total employment - No port city *→**Evaluation:medium/high***	- People's Bank of China not located in Shanghai, only a sub-branch - Shanghai is not the capital - Regulators not located in Shanghai, only sub-branches - No (or just very few) headquarters of domestic banks - Branches and subsidiaries of foreign banks: 165 (in 2008), 24% of all 689 financial institutions, share of foreign assets on all bank assets under 10%; - Highest concentration of foreign financial institutions in China; - Employees in financial services: 176,000 in Shanghai (in 2007), 3.4% of total employment - International port city, 2nd largest port in the world *→ **Evaluation: medium***
Geographic Reach	- Global financial centre - Global gateway to Europe - Characteristics of an off-shore centre - Mobility is high: incl. airports, traffic and hotels; - Communication infrastructure is well developed; - Loosing business to other niche-centres - International promotion activities are fragmented *→ **Evaluation: high***	- Interregional financial centre, with strong linkages to other European financial centres - Characteristics of an on-shore centre - Mobility is high: incl. airports, traffic and hotels - Communication infrastructure is well developed - International promotion activities are concerted via *Frankfurt Main Finance*; *→**Evaluation: medium***	- Domestic financial centre - Characteristic of an on-shore centre - Financial markets still relatively isolated, non-convertibility of RMB - Mobility is medium-high: incl. airports, traffic and hotels - Communication infrastructure is fair-medium developed - International promotion still in initial phase - Involved agencies and institutions are highly decentralized; *→ **Evaluation: low***
Products	- Low level of regulation, but challenged by increasing pan-European regulation - Strong position of stock markets - Derivative Trading: biggest market in the world - FX market: biggest in the world (35% of global turnover) - Reinsurance market biggest in the world	- Medium level of regulation, supported by increasing pan-European regulation; - German Stock Exchange: turnover of 1.6 bn. USD, number 7 in the world - 90% of German stocks traded in Frankfurt - Low internationalisation of primary markets (2001-2008: only 7 foreign IPOs vs. 148 domestic ones: 4.8% of	- High level of regulation, but challenged by increasingly streamlined international regulations - Weak position of segmented stock markets, external financing via bonds and stocks only 10.1 and 3.9 % in 2006) - Bond market dominated by treasury and PBOC bonds, 70% of all company bonds issued by state-owned companies

	- International insurance market, biggest in the world (gross premium income of 40 bn. USD in 2007) - Foreign equity trading: a leading centre - International IPOs: a leading centre - Separated and specialised banks; → ***Evaluation: high***	IPOs foreign dimension) - Domestic banks are universal banks - High level of outstanding commercial bank loans - Re-regionalization of foreign banks in Germany, moving away from financial centres, number of finance related jobs is decreasing →***Evaluation:medium***	- Main share of tradable shares is hold by individual investors, result is immense volatility in the market - Products available: convertibles, derivatives, commodity-futures, options, ETFs, repos, company and treasure bonds - Gold Exchange: world largest gold spot market in 2008 - Future Exchange: copper, aluminum, zinc, steel wire rod, rebar, natural rubber, fuel oil and gold - Market capitalization in June 2009: 2,330 bn. USD, 2nd largest in Asia in 2008 - Domestic banks are specialised banks - Strong position of banking sector, external financing via commercial loans 84,9% in 2006 →***Evaluation: low/medium***
Value-added Chain	- Value-added per employee is 50% above UK average - Big talent pool and level of research; - High number of top universities (14% students coming from abroad) → ***Evaluation: high***	- Value-added per employee is 50% above Germany's average - Big talent pool and level of research - Number of specialised universities → ***Evaluation: high***	- Value-added per employee is not known - Too small talent pool and level of research - A Number of specialised universities → ***Evaluation: low/medium***

V. The Future Development of the Financial Centre Shanghai

Given the overall dynamics of China's financial system, the size and momentum of China's economy and the development of Shanghai as the domestic financial centre of China, the chance to transform Shanghai into an international financial centre is promising. As the domestic financial centre of one of the most dynamic and largest economy worldwide, Shanghai is endowed with optimal pre-conditions to develop into a global financial centre as required by the State Council. However, the further development depends also on decisions of the central government and central regulatory authorities. It seems to be in the interest of Shanghai to support and promote all activities that strengthen the financial market system and foster financial innovation. The support from central authorities is crucial, especially with regard to the internationalisation of the RMB and the further opening up of the financial markets. Nevertheless, Shanghai local government's efforts can essentially accelerate the speed of development and be decisive, as in fostering the attractiveness of the city for people and capital, as well as in building up soft-factors like strengths in education and research. Especially the development of its financial markets can accelerate Shanghai's global importance, combined with a strong international marketing and reputation building.

During the past two decades Chinese politicians repeatedly declared support for Shanghai for the position of an international financial centre. In 1991, Deng Xiaoping, stated: ‘If we want to have a say in the world of finance, we need to rely on Shanghai.’[59] One year later, the report of the former president Jiang Zeming at the 14th National Congress of the Communist Party of China outlined the goal to ‘build Shanghai into one of the world’s centers for economy, finance and trade.’[60] In 2004, during a trip to Shanghai, President Hu Jintao repeated the government’s interest in making Shanghai an international financial hub. Finally, on March 25th 2009, the State’s Council Standing Committee approved the Shanghai government’s plan to transform the city into a global financial centre. On 1st August 2009, the ‘Statute of Shanghai’s promoting the construction of an international financial centre’ will be officially implemented. Recently, the Shanghai city committee and government have approved the document ‘Some comments regarding more promotion on reform and development of Shanghai’s state-owned financial capital and city-owned financial corporations’ in principle. In September 2009 Fang Xinghai, director-general of the Shanghai government’s *Financial Services Office*, stated that the Shanghai Stock Exchange will get an international board and see first listing in early 2010 – after the approval of the central government.[61] Given the political support of the central government and the fundamental capability of the Chinese financial sector, Shanghai clearly has the potential to reach its ambitious goals. To accelerate the future development, a more detailed planning becomes essential. The recently published 93 points plan of Shanghai’s *Finance Service Office* is a first step in this direction. The main points are:

- To **strengthen the financial market system** as such, the completion of a national voucher exchange center in Shanghai, the establishment of a credit transfer program, the listings of various futures, the attraction of domestic and foreign re-insurance companies is planned and further pilot projects are to be set up.

- To **support the system of financial institutions**, the attraction of venture capital companies, securities companies, and insurance asset management companies is intended. Generally, the market functions of investment banks, funds management companies, asset management companies, capital management companies and financing lease companies must be improved. Further reforms of the Shanghai financial SOEs are designed as well.

- To **accelerate the innovation of financial products** and the construction of business systems, REIT (real estate investment trust) products ought to be launched, M&A projects should be supported and cross agency, cross-market and cross-product financial services have to be developed. This includes cooperation of the Ministry of Finance, the Administration of Taxation, China Insurance Regulatory Commission and China Security Regulatory Commission. After further studies, financial derivatives based on stock index, exchange rate, interest rates, equity capital, bond and bank credits are required to be launched. Offshore financial business in Yangshan free trade port shall be studied.

- To **enlarge the financial openness to the outside**, the size and proportion of offshore investors in the Shanghai markets have to be gradually increased. Furthermore, the size of international development agencies to issue RMB bonds should be expanded,

[59] Caijing (2009): Shanghai’s Route to Financial Prestige.
[60] Caijing (2009): Shanghai’s Route to Financial Prestige.
[61] See: Financial Times (2009b).

as well as the cooperation with the Hong Kong stock market. The trade of Hong Kong securities linked to the ETF (Exchange Traded Funds) at the Shanghai Stock Exchange is to be put forward.

- To **complete the financial service system**, the development of international trade of RMB settlement, the further construction of the financial district Lujiazui as well as the adjunct service functions and the construction of the financial zone on the Bund should be carried out. In order to back up the service platform of the People's Bank of China, eight Xinhua financial information platforms, the first Financial Media Company and further civil financial information services should be supported.

- To **optimize the financial service system**, financial information mechanisms and further cross-industry and cross-market cooperation shall be fostered. This includes the '3+2' financial conferences with participation of China Banking Regulatory Commission Shanghai, China Security Regulatory Commission Shanghai, China Insurance Regulatory Commission Shanghai and People's Bank of China Shanghai headquarter and Shanghai *Financial Services Office*. High-level financial talents should be attracted and the education and training efforts of financial talents by colleges and universities should be further supported. Construction of the Shanghai Pudong International Financial Research and Training Center should also be completed.

- To **develop the shipping financial services vigorously**, the full range of off-shore shipping finance products should be explored and financial institutions, as well as financial products, must be developed.[62]

V.1 The necessary and sufficient conditions of Shanghai's Development

As the analysis of London and Frankfurt has shown, the development of an international financial centre depends on a number of necessary and sufficient conditions which need to be fulfilled. We see as necessary conditions for Shanghai the full convertibility of the RMB as well as an easing of the capital controls, the relaxation of the market entry-restrictions for foreign companies on an industry as well as market level and the harmonization of the gaps between domestic and international regulation. Regarding these adjustments Shanghai cannot influence the outcome proactively, but still depends on the decisions of the central government. However, the adjustments would have a tremendous impact on the classification of Shanghai according to the four dimensions. The client base is expected to internationalize much stronger given the relaxation of market entry barriers for foreign companies like banks, security traders and insurance companies. This should include the possibility for overseas companies to issue RMB bonds and list stocks at the Shanghai Stock Exchange. The listing of overseas companies will have a significant impact on the market structure, investment channels, corporate governance and legal environment. Given the RMB gradually becoming an international currency combined with more relaxed capital controls, the geographic reach of Shanghai will increase dramatically. A harmonization of the gaps between domestic and international regulation brings the potential to increase the scope of products offered in the financial centre. To summarize, the adjustment of the necessary conditions brings significant improvement in the dimensions clients, geographic reach and products and is therefore absolutely crucial to move Shanghai from a domestic position towards an international one.

[62] Shanghai Financial Services Office (2009): 93 initiatives plan.

Additionally, a set of sufficient conditions has to be fulfilled. Communicational infrastructure, mobility, education and research, and the quality of life in the city are striking factors that must not be neglected in the forthcoming development process. In detail we see the following issues as most important with regard to factors that Shanghai can influence proactively.

- Clustering of domestic business development units, Asian headquarters of foreign firms and at least subsidiaries of regulators, the central bank and other financial authorities can be promoted by Shanghai. Especially according to the foreign companies this requires an international competitive business and living environment like transportation, logistic, a modern legal framework and professional services like accounting, consulting and law firms. This development would directly affect Shanghai's classification according to the first dimension 'clients".

- International promotion and reputation building as well as further improvement of the communicational infrastructure and mobility capacities are directly influenced by Shanghai itself and can have a huge impact on the geographic reach, as seen by other financial centres. Especially the marketing of the Lujiazui area as an international brand like 'Wall Street' of China has potential. Given the size of the task and vast variety of the finance industry in Shanghai, it is recommended to develop the *Financial Services Office* into a unique platform for the public and private finance community similar to *Frankfurt Main Finance*, which coordinates the promotion and development of Shanghai into an international financial centre.

- Further development of financial education, talent management and research is advisable. Not only finance related degree programs like Bachelor, Master or MBA should be offered, but also certification, executive education and training programs for professionals of the finance industry should be offered covering traditional financial topics like risk management, for example, but also innovative subjects like renewable energy financing, microfinance, private wealth management, ship financing, investment banking and so on. Furthermore, not only homegrown talents should be recruited but also high potentials from abroad, who require a comparable attractive living and business environment of the city.[63] Together with the enhancement of the environmental factors like the environment protection, schooling, housing, healthcare and culture these factors are crucial conditions to improve the value added of the fourth dimension.

VI. Conclusion

If it is correct that the international ranking of a financial centre is positively correlated with the importance of the surrounding economy one does not have to be a prophet to predict the rise of Shanghai into the top league within approximately the next ten years. However, the development towards an international financial centre is not a fast-selling item. Our comparative analysis makes the point clear regarding the development of London and Frankfurt. Both financial centres implemented certain institutional as well as organizational settings in order to promote their cities as international financial centres and attract foreign investors. This is especially true for London as we think of the *Big Bang*, for instance.

However, to generate guidance for Shanghai it is not sufficient to learn from other cities but to dispose of a reasonable guidance in order to identify the most urgent areas of improvements.

[63] Since 2008 the Shanghai Financial Service Office are already organizing oversee trips of representative of banks, insurers and brokers to hire senior financial professionals and experienced bankers; see Shanghai Daily (2009), p. 12.

We can show that the division into the categories ‘clients, geographic reach, products, and value-added chain’ is fruitful for Shanghai if it is combined with a comparative analysis with existing financial centres in the form of a gap analysis. Using a simple ranking of ‘low, medium, and high’, it is in principle concluded that Shanghai is still a domestic financial centre and neither an international one like London nor even an interregional one like Frankfurt.

Nevertheless, given the activities and efforts of central and local Chinese authorities, Shanghai is in terms of the category ‘clients’ and ‘products’ in our analysis already close to Frankfurt. This is particularly the result of the stage of development of the Shanghai Stock Exchange, which is already one of the most important ones worldwide these days.

However, to upgrade the ranking into ‘high’ like London some policy changes are necessary, especially with regards to the convertibility of the RMB as well as the degree of market openness to foreign investors. Furthermore, it seems to be necessary to adjust the domestic regulations closer to the international standards and foster all activities that are increasing the financial market system and innovative financial products. The imperative of this kind of actions implies a principle result of the paper: Shanghai needs the support of the policymakers in Beijing in order to set up the right framework for an international financial centre. This is a conditio sina qua none.

The continuing domestic setting of China’s banking and finance industry and hence Shanghai as a domestic financial centre is also the main reason that the category ‘geographical reach’ is still ranked as ‘low’ for Shanghai compare to ‘high’ for London and ‘medium/high’ for Frankfurt. However, Shanghai can manage what we call the ‘sufficient’ factors of an international financial centre in opposite to the ‘necessary’, which are controlled by the central authorities in Beijing. This includes, for instance, the attraction of more foreign companies to move their regional Asian Headquarters to Shanghai, further improvement of the intellectual and communicational infrastructure as well as the mobility capacities and the environment, and last but not least branding and reputation building activities promoting Shanghai as a financial centre internationally.

With regard to the category ‘value-added chain’ which is heavily determined by the variable ‘education’, the problem of Shanghai is mostly quantitative and not qualitative given the size of the finance industry and the huge demand for financial talents in a fast-growing market. What is needed is especially financial executive and professional education that combines theoretical know-how with the practical needs of the industry.

Overall the paper suggests that Shanghai should choose a two-step approach developing into an international financial centre: First, become an interregional financial centre and afterwards an international one. If this is right further analysis has to be done to compare Shanghai with the financial hubs in Asia, i. e. Hong Kong and Singapore.

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