

**Xinhua-Dow Jones
International Financial Centers
Development Index
(2012)**

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Preface

International financial centers are formed as a result of the flow and aggregation of financial factors in global scope. Whether a city will develop into an international financial center depends on its comprehensive competitiveness in terms of financial market construction, growth and development capability, industrial support, city service standards, and the national environment. In an era of economic globalization, international financial centers boast richer functions and more diversified types, which have presented a multivariate development pattern. The construction of international financial centers in emerging economies, in particular, has attracted more and more attention across the world. Under such circumstances, it has become necessary as a matter of urgency to make scientific and all-round assessment on the development status of international financial centers, probe their development rules, and promote the reasonable flow of global finance factors.

In 2010, Xinhua News Agency linked up with the Chicago Mercantile Exchange Group (CME), which owns the former Dow Jones Index Service Co. and now also the Standard & Poor's Dow Jones Index Co., to jointly launch the Xinhua-Dow Jones International Financial Centers Development Index (IFCD). A report on the IFCD is released every year to assist the practical development and application of international financial centers and national and regional economies, and for related academic study.

Following the principle of a “scientific and impartial” approach, the IFCD adopts development and progressiveness as a major dimension practiced throughout its index research and development efforts, paying specific attention to international financial centers’ progress and focusing not only on the existing capacity but also growth capability. In doing so, the IFCD aims to share its important value as a store of experience to help constitute an assessment system of international financial structure and to boost the reasonable flow of global financial elements.

The IFCD adopts an index compiling methodology of combining an objective indexing system with subjective questionnaire surveys so as to reach a comprehensive conclusion covering both the objective examination and subjective appraisal over international financial center cities.

Regarding methodology design, a progressive analytic framework has been introduced to exercise all-around analysis of the development situation as international financial centers of 45 selected sample cities. In the first level analysis, by examining the intermittent difference of scores, a comprehensive assessment is made to specify the difference of the index. The focus of the second level is on breaking down the IFCD index into smaller sub-indexes, engaging in deeper analysis on every element to elaborate the excellence and weakness of specific financial center cities. The third level observes the regional distribution of financial center cities to illustrate the regional environment’s influence on functioning of the financial centers. The fourth level unveils the world’s

on-going economic development hot spots, while financial center cities in the BRICS countries are examined one by one through Xinhua's global IFCD index surveying system, which provides for the equal usage of subjective questionnaire surveys and regional in-depth interviews to collect respondents' comments across the world on the development standards of financial center cities in BRICS countries.

Data that underpins the index, which is all collected from third-party international authorities, have been proven stable, reliable, transparent, and credible. Meanwhile, the objective data is mostly obtained in form of three-year averages to avoid contamination by incomparable interference factors, while Xinhua's global information collection network and its partner Nielsen's surveying system are responsible for the acquisition of subjective survey results by rolling out a questionnaire system on global international financial center cities, aiming to measure international financial centers' soft power on an all-around and scientific basis.

Specifically, in the work of the questionnaire surveys, a variety of views from respondents in different industries and regions is put under full consideration as questionnaire survey samples are carefully studied and analyzed in terms of credibility and validity to make sure the results of the surveys meet the rules and are more scientific.

The IFCD, which was successfully published in 2010 and 2011, has received extensive praise and has been gradually recognized by global political circles, business circles, and the academic world and has provided an important reference for global investors to objectively learn the growth capability, industrial support and policy and

system environment of regional financial markets. In 2012, the research group, consistently upholding the development philosophy of sustainability and tolerance, scientifically screening the sample cities of financial centers, gradually improving the index research methods (see Part IV. of this report) and establishing a comprehensive assessment system that combines subjective and objective evaluation (see Appendix II of this report), launches the "IFCD2012" to the world.

I. Analysis of IFCD Results

Cities ranking the first 10 places in the IFCD2012 comprehensive assessments are New York, London, Tokyo, Hong Kong, Singapore, Shanghai, Frankfurt, Paris, Zurich, and Chicago.

(I) Comprehensive evaluation of development of international financial centers

1. Selection of sample cities

Generally speaking, an international financial center has following major characteristics: first, it assembles certain number of financial institutions engaged in international businesses, such as international large banks, securities brokers, insurers, fund firms, and so on; secondly, it boasts a relatively complete international finance market system, including a stock market, bond market, Interbank lending market, gold market, foreign exchange market, and so on; thirdly, it holds relative large-scale international finance trading activities, including issuing and trading of stocks, borrowing and lending of

capital and so on; fourthly, it is located in a modern city, with developed communication networks, sound traffic conditions, a developed service industry, and a relatively high degree of openness.

In order to ensure that the selection of financial center sample cities is scientific, comprehensive, and representative, this report further defines the above-mentioned characteristics into the following principles:

(1) Scale: namely, the ranking of cities' finance trading scale in stocks, bonds, funds, foreign exchange, and so on;

(2) Growth capability: namely, ranking of cities' development momentum of finance

markets of stocks, bonds, and foreign exchange etc;

(3) Equilibrium: namely, the distribution of sample cities will be balanced so as to ensure that major economies of the world will have representative cities selected.

In light of the above-mentioned principles, the IFCD2012 selects 45 cities as the sample cities of international financial centers, as shown in Table 1, which are consistent with the sample cities of the IFCD2010 and the IFCD2011, reflecting the continuity and stability of the international financial centers development index.

Table 1 Sample cities and regional distribution of the IFCD2012

Europe	Amsterdam	Vienna	Oslo	Paris
	Budapest	Brussels	Dublin	Frankfurt
	Copenhagen	Helsinki	Lisbon	Luxembourg
	London	Rome	Madrid	Milan
	Moscow	Munich	Geneva	Stockholm
	Zurich			
America	Boston	Buenos Aires	Toronto	Chicago
	Washington	San Francisco	Montreal	New York
	Sao Paulo	Vancouver		
Asia	Tokyo	Osaka	Dubai	Mumbai
	Singapore	Beijing	Shanghai	Shenzhen
	Seoul	Taipei	Hong Kong	
Other	Johannesburg	Melbourne	Sydney	

2. Complex ranking results

Based on the comprehensive evaluation system of the IFCD and after comprehensive analysis and calculation, we obtain the comprehensive scores and ranking results of the development indices of the 45 international financial centers (see Attached Figure 1), of which, the international financial centers that rank the top 10 are, from the top

down, New York, London, Tokyo, Hong Kong, Singapore, Shanghai, Frankfurt, Paris, Zurich, and Chicago. In comparison with 2011, the ranking of the top six cities has remained stable, Frankfurt and Paris have exchanged ranking, and Sydney and Amsterdam have been replaced by Zurich and Chicago. In general, the complex ranking of the 45 international financial centers presents the following characteristics:

Firstly, the rankings of the international financial centers keeps stable as a whole in 2012, with the amount of variation higher than 2011 (See Figure 1). In 2012, the number of financial centers with stable or relatively stable rankings totals 28, accounting for 62.22 percent of the total sample cities, while in 2011, and this figure is 37, which accounts for 82.23 percent of the total. As for the number of cities with big variation in rankings, the year of 2012 has 14, which is much higher than in 2011, which only saw five such cities. Zurich, Beijing, San Francisco, Brussels, Madrid, Mumbai, Moscow, Taipei, and Lisbon have moved to higher positions and of these, Mumbai and Taipei have seen higher rankings for two years in a row. Sydney, Amsterdam, Washington, Helsinki and Rome have fallen to lower positions, of which, Washington, Copenhagen, Helsinki and Rome have seen lower rankings for two years in a row. Three cities, Copenhagen, Oslo and Luxembourg, post unusual fluctuations in their positions in 2012, which see their rankings decline by 5, 8 and 9 respectively and continue the descending trend of 2011. It is not hard to see that in 2012, financial center cities that have

seen big declines in their rankings are mainly located in Europe, which to some extent reflects the influence brought by the problems there including the European sovereign debt crisis.

Secondly, the top 10 international financial centers have formed a relatively balanced geographical distribution, as shown in Table 2. Since the year of 2010, New York, London, Tokyo and Hong Kong have always occupied the top four positions in the rankings of international financial centers, which indicates that the status of these four cities as international financial centers has been universally acknowledged. The four cities, including Singapore, Shanghai, Frankfurt, and Paris, are in positions 5 to 8. But the rankings of Singapore and Shanghai have moved forward gradually, while the ranking of Paris has dropped year by year and that of Frankfurt has moved between the seventh and the eighth, which reasonably reflects the growth capability of international financial centers of Asia. The cities rank 9th and 10th noticeably fluctuate, changing frequently.

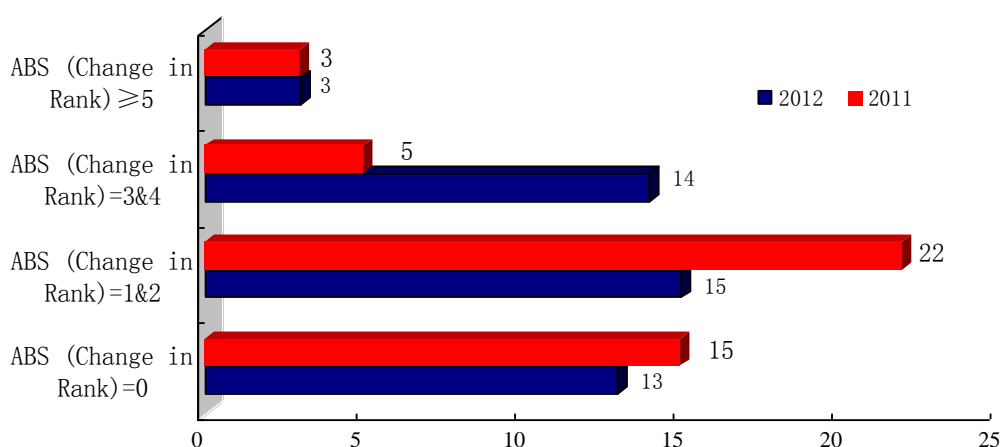


Figure 1 Analysis of Categorization Based on Position Difference of IFCD2012

Table 2 Top 10 international financial centers in 2010-2012

Ranking	2012	2011	2010
1	New York	New York	New York
2	London	London	London
3	Tokyo	Tokyo	Tokyo
4	Hong Kong	Hong Kong	Hong Kong
5	Singapore	Singapore	Paris
6	Shanghai	Shanghai	Singapore
7	Frankfurt	Paris	Frankfurt
8	Paris	Frankfurt	Shanghai
9	Zurich	Sydney	Washington
10	Chicago	Amsterdam	Sydney

Thirdly, the international financial centers keep relative stable in their categorized groups and the gap between cities has somewhat widened. In light of scores they

obtained, the 45 cities are categorized into four groups by ranks, namely the 1st-4th, the 5th-8th, the 9th-25th, and the 26th-45th. The aggregate performance of the four groups is shown in Table 3.

Table 3 Categorized groups of international financial centers

Group	2012			2011		
	Average score	Difference inside group	Difference with 1st group	Average score	Difference inside group	Difference with 1st group
1st	79.42	14.77	0.00	85.41	5.51	0.00
2nd	62.86	3.46	16.56	70.43	10.13	14.98
3rd	43.61	17.18	35.81	48.15	16.23	37.26
4th	32.63	15.23	46.79	33.26	14.26	52.15

The first group consists of London, New York, Tokyo, and Hong Kong, which can all be called top-level financial centers. In comparison with 2011, the difference in scores inside the first group grows larger in 2012, which shows that the gap between the four international financial center cities has widened somewhat. Specifically, Tokyo and Hong Kong noticeably lag behind New York and London.

The second group is composed of Singapore, Shanghai, Paris and Frankfurt, which are the most representative cities. In 2012, the difference in scores of cities in the

second group lessens remarkably, which reflects the increasing competition in financial resources among the cities and their development capacity is getting closer to each other. Its gap with cities in the first group widens slightly, mainly with New York and London. The gap with Hong Kong and Tokyo narrows, which to some extent reinforces the judgment that “the second group is a strong competitor to the first group and also an alternate candidate, the member of which are very likely to replace some members in the first group in future competition.”

The third group consists of 17 cities with ranks of the 9th to the 25th. Compared with

2011, the members of the group see only fine adjustments in 2012, with Vancouver replacing Copenhagen to enter this group. On the whole, the third group sees increasing difference in scores, which shows the diverged capabilities of cities in financial factor distribution, but the gap with the first group narrows somewhat, which reflects that the third group still has a degree of growth capability.

The fourth group is composed of 20 cities ranking 26th to the 45th. As with the third group, cities in the fourth group see larger difference in scores, but have narrowed the gap with the first group. In fact, the declining of European cities and the rising of Asia-Pacific cities in ranks coexist inside the fourth group, which to some extent reveals the development trend of the international financial centers.

(II) Analysis of development indicators of international financial centers

Comparative analysis on the evaluation results of primary indicators and their corresponding secondary indicators can lead to better understanding of the competitiveness and development of international financial centers.

1. Financial market

The secondary indicator of the financial market includes four sub-elements, including the capital market, the forex market, the banking market, and the insurance market. Synthesizing the evaluation results on the four sub-elements of the 45 international financial centers, we get the ranking of their power in financial market development. The top 10 cities are as follows (Table 4):

Table 4 Top 10 cities in financial market

Ranking	2012	2011	2010
1	New York	New York	London
2	London	London	New York
3	Tokyo	Tokyo	Tokyo
4	Hong Kong	Hong Kong	Hong Kong
5	Frankfurt	Paris	Paris
6	Shanghai	Frankfurt	Frankfurt
7	Singapore	Shanghai	Shanghai
8	Paris	Singapore	Singapore
9	Zurich	Beijing	Zurich
10	Chicago	Chicago	Washington

The year of 2012 witnesses the following features in terms of financial market element assessment:

First, the ranking of the financial market element is similar to that of the city's comprehensive index, which indicates that the financial market is the core module that composes a financial center and its degree of development is crucial to the ranking of a financial center.

Secondly, financial centers in the top 10 of the ranking list concerning financial market sub-elements maintain a state of general stability in 2012 and still remain the mainstream financial centers in the world. Financial markets in these areas have gained long-term accumulated advantages and other financial centers cannot pose a threat to them in the short term.

Thirdly, European cities' rankings see bigger changes. As shown in Table 5, the cities whose positions fell by more than five include Berlin, Luxemburg, and Munich and are among the lowest-rated European cities. The cities whose positions rose by more than five include Toronto, Rome, Brussels, Madrid,

Vancouver, San Francisco, and Vienna.

Table 5 Cities with bigger change of positions in ranking of financial market

City	2012	2011	Change of position	ABS of change
Copenhagen	38	27	-11	11
Dublin	39	31	-8	8
Toronto	14	21	7	7
Stockholm	28	35	7	7
Rome	29	36	7	7
Vancouver	33	39	6	6
Madrid	24	30	6	6
Luxembourg	34	28	-6	6
San Francisco	13	18	5	5
Munich	27	22	-5	5
Vienna	32	37	5	5
Washington	17	13	-4	4
Seoul	22	26	4	4
Paris	8	5	-3	3
Melbourne	36	33	-3	3
Mumbai	23	20	-3	3

2. Growth and development

The growth and development indicator contains four sub-elements, i.e. capital market growth, economic growth, city innovative capacity, and creation potential. Synthesizing the evaluation results on the four sub-elements of the 45 international financial centers we get the ranking of their importance in growth and development. The top 10 cities are as follows (Table 6):

The growth and development indicator assessment in 2012 shows the following features:

Firstly, the top 10 cities basically hold their positions. They include those in developed countries such as New York, London, and fast-growing markets in the Asia-Pacific region such as Shanghai and Singapore, which fully reflect the growth.

Secondly, New York and London's

rankings improve significantly in terms of growth and development, and New York has overtaken Shanghai and climbed to the No. 1 spot. This shows that the two internationally recognized financial centers are not only strong but also have great development potential.

Table 6 Top 10 cities in growth and development

Ranking	2012	2011	2010
1	Shanghai	Shanghai	Shanghai
2	New York	Hong Kong	Hong Kong
3	London	Tokyo	Beijing
4	Hong Kong	New York	New York
5	Beijing	Singapore	Tokyo
6	Tokyo	Beijing	London
7	Singapore	London	Singapore
8	Shenzhen	Dubai	Dubai
9	Paris	Seoul	Paris
10	Frankfurt	Shenzhen	Shenzhen

Thirdly, rankings see wider fluctuation than last year (See Table 7). Sao Paulo,

Stockholm, Johannesburg, Dubai, Milan, Buenos Aires, Mumbai, Taipei, and Luxembourg, which are mainly from Europe and emerging economies, scored sharply lower than a year earlier. In the meantime, the positions of Seoul, Zurich, Vancouver, Melbourne, Brussels, Montreal, Dublin, San Francisco, Chicago, Toronto, and Vienna achieved large rises. Those cities are from

Europe and the US and relatively mature in financial market development. Such a change in rankings reflects that the traditional financial centers maintain their competitiveness while the emerging economies' financial center position has not stabilized yet and is more vulnerable to external influence.

Table 7 Cities with bigger changes of position in ranking of growth and development

City	2012	2011	Change of position	ABS of change
Sao Paulo	39	16	-23	23
Johannesburg	45	31	-14	14
Zurich	11	23	12	12
Vancouver	24	36	12	12
Melbourne	26	38	12	12
Montreal	31	41	10	10
Dubai	17	8	-9	9
Milan	33	25	-8	8
Dublin	32	40	8	8
Buenos Aires	42	34	-8	8
Mumbai	18	11	-7	7
Taipei	27	20	-7	7
Luxembourg	40	33	-7	7
Chicago	13	19	6	6
San Francisco	12	18	6	6
Toronto	20	26	6	6
Vienna	37	43	6	6
Paris	9	14	5	5
Seoul	14	9	-5	5
Copenhagen	34	39	5	5
Rome	35	30	-5	5
London	3	7	4	4
Amsterdam	21	17	-4	4
Tokyo	6	3	-3	3
Stockholm	29	32	3	3

3. Industrial support

The indicator of industrial support has three sub-elements, including business environment support, basic city conditions, and city infrastructure. The index assesses all

the three elements to evaluate the industrial support capability of the 45 international financial centers and the top 10 cities are displayed in Table 8:

Table 8 Top 10 cities with strongest industrial support

Ranking	2012	2011	2010
1	New York	New York	New York
2	London	Tokyo	Tokyo
3	Tokyo	London	London
4	Shanghai	Hong Kong	Hong Kong
5	Hong Kong	Singapore	Singapore
6	Singapore	Shanghai	Paris
7	Frankfurt	Paris	Shanghai
8	Beijing	Frankfurt	Frankfurt
9	Paris	Beijing	Beijing
10	Chicago	Chicago	Dubai

The 2012 industrial support index assessments demonstrate the following features:

Firstly, similar to last year, the top 10 financial centers have maintained stability in the ranking list of industrial support.

Secondly, European cities' rankings generally present a declining trend. As is shown in Table 9, cities such as Stockholm, Geneva, Brussels, Luxembourg, and Oslo dropped by more than five slots in their rankings, indicating that the European debt crisis has exerted a negative effect on European financial centers' industrial support.

Thirdly, except for Mumbai whose industrial support rank has risen significantly, emerging economies' industrial support positions remain low. This fully illustrates the industrial support's influence on financial centers' rankings. Infrastructure construction and the related industries development have become important reference factors to evaluate the development of international financial centers. The high-ranked financial centers in developed countries have greater ability in allocating the industrial support element.

Table 9 Cities with bigger changes of position in ranking of industrial support

City	2012	2011	Change of position	ABS of change
Mumbai	22	40	18	18
Brussels	35	25	-10	10
Geneva	27	18	-9	9
Madrid	25	33	8	8
Boston	29	22	-7	7
Stockholm	34	27	-7	7
Melbourne	23	30	7	7
San Francisco	13	19	6	6
Vienna	31	37	6	6
Luxembourg	40	34	-6	6
Zurich	12	17	5	5
Washington	19	14	-5	5
Dubai	16	11	-5	5
Oslo	37	32	-5	5
Taipei	33	38	5	5
Lisbon	41	45	4	4
Vancouver	26	29	3	3
Moscow	20	23	3	3
Montreal	38	35	-3	3

4. Service level

The indicator of service has three elements, including government services, intellectual capital, and urban environment. The index assesses all the three elements to evaluate the service standard of the 45 international financial centers (Figure 5) and the top 10 cities are displayed in Table 10:

The 2012 service index assessments show the following features:

Table 10 Top 10 cities with highest service level

Ranking	2012	2011	2010
1	New York	New York	London
2	London	London	New York
3	Tokyo	Tokyo	Tokyo
4	Hong Kong	Hong Kong	Paris
5	Paris	Paris	Hong Kong
6	Singapore	Singapore	Singapore
7	Frankfurt	Shanghai	Zurich
8	Zurich	Frankfurt	Washington
9	Chicago	Geneva	Geneva
10	Sydney	Zurich	Sydney

Firstly, traditional European and American financial centers show prominent advantages. Ranging from developed world financial centers to small-scale regional financial centers, traditional western financial centers all received generally high assessment results in this aspect.

Secondly, compared with Europe and the US, the financial centers in emerging economies generally scored low on service standards and their ranks tend to fall further. For example, Shanghai service ranks have dropped to 12th place, which is far behind Shanghai's ranking in other elements. Beijing,

Shenzhen, Seoul, Osaka, Mumbai, Moscow, Budapest, Johannesburg, Buenos Aires, and Sao Paulo received scores that put them toward the bottom of the ranking. The service standard of these cities all face immense challenges in the days ahead, especially in the area of government service where they need to respect and adapt to the rules of a market-oriented economy. There is room for countries in the Asia-Pacific region to improve government administration and service capability as a whole.

Thirdly, there are no clear-cut characteristics for the cities showing big fluctuations in ranking (Table 11). The cities of Melbourne, Chicago, Boston, Helsinki, and Lisbon climbed by more than five slots but their geographical characteristics are not prominent. The cities whose ranks dropped more than five places include Oslo, Dubai, Munich, Shanghai, and Shenzhen and are mainly from Europe and Asia.

Table 11 Cities with bigger change of positions in ranking of *service level*

City	2012	2011	Change of position	ABS of change
Oslo	32	21	-11	11
Dubai	27	18	-9	9
Melbourne	23	30	7	7
Munich	26	20	-6	6
Shanghai	12	7	-5	5
Chicago	9	14	5	5
Shenzhen	40	35	-5	5
Boston	17	22	5	5
Helsinki	21	26	5	5
Lisbon	38	43	5	5
Washington	16	12	-4	4
Vienna	19	23	4	4
Taipei	36	40	4	4
Copenhagen	20	17	-3	3
Madrid	25	28	3	3
Montreal	30	33	3	3
Osaka	34	37	3	3

5. General environment

The indicator of general environment is composed of three sub-elements, including the economic environment, political environment, and openness. The index assesses all these three elements to evaluate the general environment of the 45 international financial centers and the top 10 cities are displayed in Table 12:

The 2012 general environment index assessments demonstrate the following features:

Firstly, this year's environment element maintains stable. Financial centers in the developed economies such as Europe and the US are generally in high positions while those in emerging economies have lower rankings.

Secondly, among the cities with bigger ranking changes, Vienna and Frankfurt advanced significantly while the positions of Washington fell drastically.

Table 12 Top 10 cities with most favorable *general environment*

Ranking	2012	2011	2010
1	New York	London	London
2	London	New York	New York
3	Hong Kong	Tokyo	Tokyo
4	Frankfurt	Hong Kong	Hong Kong
5	Tokyo	Paris	Paris
6	Singapore	Singapore	Washington
7	Zurich	Amsterdam	Singapore
8	Paris	Frankfurt	Sydney
9	Geneva	Sydney	Zurich
10	Amsterdam	Geneva	Frankfurt

Table 13 Cities with bigger changes of position in ranking of *general environment*

City	2012	2011	Change of position	ABS of change
Vienna	14	23	9	9
Washington	20	12	-8	8
Frankfurt	4	8	4	4
Zurich	7	11	4	4
Toronto	11	15	4	4
Taipei	33	37	4	4
Shanghai	16	19	3	3
Paris	8	5	-3	3
Beijing	27	30	3	3
Sydney	12	9	-3	3
San Francisco	19	16	-3	3
Amsterdam	10	7	-3	3
Dubai	32	29	-3	3

II. Geographic Distribution of Global Financial Centers

We list 45 international financial centers based on the development index. Table 14 shows the geographic distribution of these financial centers around the world. According to the table, Europe has the biggest number of financial centers, followed by the Asia-Pacific region and Africa. The American continent has 10 cities listed here, with eight coming from North America.

(I) General analysis

In terms of competitiveness in sub-elements, financial centers in the five continents have the following main features:

Firstly, rankings of financial centers in the continents keep stable on the whole, especially those in America, which indicates a

relatively balanced layout of international financial centers is taking shape.

Table 14 Global distribution of cities under assessment

Region	Cities involved	Top 10 cities in 2012	Top 10 cities in 2011
America	10	New York(1), Chicago(10)	New York(1)
Europe	21	London(2), Frankfurt(7), Paris(8), Zurich(9)	London(2), Paris(7), Frankfurt(8), Amsterdam(10)
Asia Pacific and Africa	14	Tokyo(3), Hong Kong(4), Singapore(5), Shanghai(6)	Tokyo(3), Hong Kong(4), Singapore(5), Shanghai(6), Sydney(9)

Secondly, New York, London and Tokyo are at the top of the ranking list in terms of sub-element evaluation, serving as weather vane for America, Europe, and the Asia-Pacific region.

Thirdly, financial centers in America and Europe have obvious advantages in financial

market service and environment, while those in the Asia-Pacific region have rising potential in terms of the elements of industrial support, and growth and development.

Fourthly, Tokyo, Hong Kong, and Singapore in the Asia-Pacific region are better than average in terms of the five elements assessment and show a more mature and stable development.

Table 15 Global distribution of top 10 cities in financial market

Region	2012	2011
America	New York(1) Chicago(10)	New York(1) Chicago(10)
Europe	London(2) Frankfurt(5) Paris(8) Zurich(9)	London(2) Paris(5) Frankfurt(6)
Asia Pacific and Africa	Tokyo(3) Hong Kong(4) Shanghai(6) Singapore(7)	Tokyo(3) Hong Kong(4) Shanghai(7) Singapore(8) Beijing(9)

Table 16 Global distribution of Top 10 cities on growth and development

Region	2012	2011
America	New York(2)	New York(4)
Europe	London(3) Paris(9) Frankfurt(10)	London(7)
Asia Pacific and Africa	Shanghai(1) Hong Kong(4) Beijing (5) Tokyo(6) Singapore(7) Shenzhen(8)	Shanghai(1) Hong Kong(2) Tokyo(3) Singapore(5) Beijing(6) Dubai(8) Seoul(9) Shenzhen(10)

Table 17 Global distribution of Top 10 cities on industrial support

Region	2012	2011
America	New York(1) Chicago(10)	New York(1) Chicago(10)
Europe	London(2) Frankfurt(7) Paris(9)	London(3) Paris(7) Frankfurt(8)
Asia Pacific and Africa	Tokyo(3) Shanghai(4) Hong Kong(5) Singapore(6) Beijing(8)	Tokyo(2) Hong Kong(4) Singapore(5) Shanghai(6) Beijing(9)

Table 18 Global distribution of Top 10 cities on service level

Region	2012	2011
America	New York(1) Chicago(9)	New York(1)
Europe	London(2) Paris(5) Frankfurt(7) Zurich(8)	London(2) Paris(5) Frankfurt(8) Geneva(9) Zurich(10)
Asia Pacific and Africa	Tokyo(3) Hong Kong(4) Singapore(6) Sydney(10)	Tokyo(3) Hong Kong(4) Singapore(6) Shanghai(7)

Table 19 Global distribution of Top 10 cities on general environment

Region	2012	2011
America	New York(1)	New York(2)
Europe	London(2) Frankfurt(4) Paris(8) Zurich(7) Geneva(9) Amsterdam (10)	London(1) Paris(5) Amsterdam (7) Frankfurt(8) Geneva(10)
Asia Pacific and Africa	Hong Kong(3) Tokyo(5) Singapore(6)	Tokyo(3) Hong Kong(4) Singapore(6) Sydney(9)

(II) Financial centers in America

Currently, the US is still the leading force that dominates global economy and displays a large economy's ability in pooling elements. Although the US expansionary fiscal policy during the financial crisis produced severe debt problems, it has also played a supportive

role in slashing private leverage and laid a foundation for the country's reindustrialization and consumption growth recovery. For example, the start-up of the credit market and rising US dollar index have played an important role in pushing global elements to flow back to the US market.



Figure 2 The Ranking of IFCD2012 in the Americas

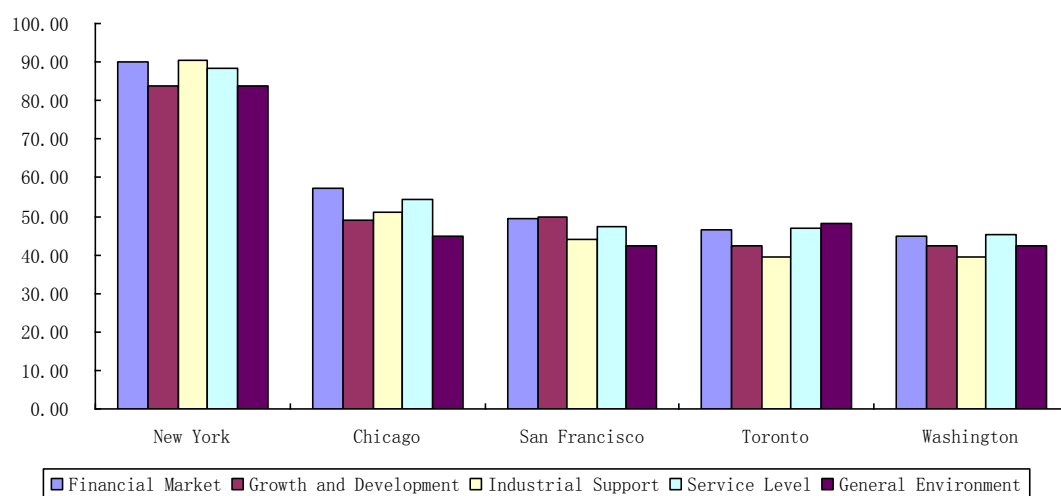


Figure 3 Indicator Scores Comparisons of the Top Five American Cities

New York ranks first in the international financial center development index. In 1810, New York replaced Philadelphia to become the largest financial and commercial center in America at a time when most international financial transactions were made in London. During and after the World War I, New York emerged rapidly as an international financial center. Figure 3 provides a comparison of all sub-elements of the top five American financial cities, which shows that New York ranks well ahead of the other four cities in all the five aspects. As for the financial market, New York is not only home to many major commercial banks, savings banks, investment banks, stock exchanges and insurance companies, but also the location of many foreign banks' branches. Around 2,800 companies choose to get listed on the New York Stock Exchange (NYSE), which has a global market value of 15 trillion US dollars.

The second top financial center in America is Chicago, which is an important financial center in the mid-western United States and also one of the global international centers. In terms of the financial market, the Chicago Stock Exchange is the second largest financial trading house after the NYSE. The Chicago Mercantile Exchange (CME), the Chicago Board of Trade (CBOT), and the Chicago Bureau of Trade (CBT) are world famous financial institutions. The CME is the largest trading market of fragile goods and a prominent financial exchange in the world. The business volume of the CBOT ranks the first in the United States. Many big banks and financial institutions are headquartered or have branches in Chicago, and there are more than 300 American banks, 40 branches of foreign banks, and 16 insurance companies in the city, which rank among the top three in the country in terms of their commercial loan volumes. Their total financial assets rank third

within Federal Reserve administrative districts. Some 33 of the Fortune Global 500 companies and 47 of the Forbes US 500 companies are located here.

San Francisco gradually developed into a financial center on the US West Coast during the gold rush in the middle of 19th century. Montgomery Street, its financial commercial district, is known as the "western Wall Street" and is home of the Federal Reserve Bank's San Francisco branch and is the formal site of Pacific Stock Exchange. The biggest bank in the US was founded in San Francisco. Many other international financial institutions, multi-national banks, and venture funds were established or headquartered here. Six of Fortune Global 500 companies are located downtown San Francisco and many professional service companies specializing in law, public relations, building, and graphic design are also there. San Francisco is one of the second-tier global cities.

(III) Financial centers in Europe

Since 2012, the deteriorating of the European debt crisis has been beyond the expectations of outsiders. Financing costs have reached risky levels a number of times in Spain, Italy, and other countries, which are struggling on the verge of asking for rescue. The political risks resulting from the general election in Greece tested the life of the decade-old currency, the euro. Spain and Cyprus asked for rescues amid the escalating crises in their banking sectors. All these factors destabilized investors' confidence and led to the swings in financial markets. European debt crises has been the top topic at world's main political and economic summits and unremitting efforts have been made by the European Commission, International Monetary Fund, European Central Bank and

other international organizations, countries, and regions to deal with European debt crises. European countries continue to face overshadowing economic prospects and need

more time and effort to shake off their respective crises, which have also shaken European financial centers.



Figure 4 The Ranking of IFCD2012 in the Europe

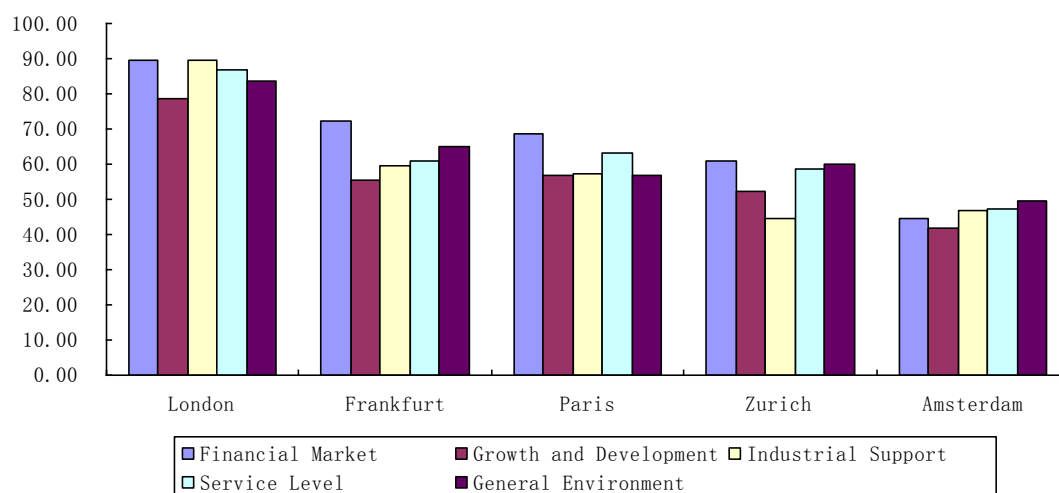


Figure 5 Indicator Scores Comparisons of the Top Five European Cities

As a major financial center of global importance, London takes the first place in Europe. London enjoys prestige in global markets in terms of stocks, bonds, foreign exchange, and in the trading of bulk

commodities and financial derivatives. Over 30 percent of global currency transactions take place in London and the London Stock Exchange is one of the world's most important securities trading houses. As of 1991, the city

of London was home to a total of more than 500 banks (of which 470 were foreign ones, representing 95 percent of the total), ranking it first in terms of global metropolitans. London's annual foreign exchange turnover totals 3 trillion pounds sterling (GBP), making it the world's largest international foreign exchange market. In addition, it is also the world's largest US dollar market. Daily turnover of the oil exporting countries in London can at times amount to more than 50 billion US dollars, taking up more than one-third of total global US dollar transactions. London is also home to the Bank of England, the British central bank, and headquarters to 13 clearing banks, including Barclays, Lloyds, Midland, and the National Westminster Bank, plus more than 60 commercial banks. The city of London is also the world's largest international insurance center with more than 800 insurance companies, of which more than 170, as many as 20 percent of the total, are branches of foreign insurance companies. Besides, in London there are many commodity exchanges dealing in gold, silver, nonferrous metals, wool, rubber, coffee, cocoa, cotton, oil, wood, sugar, tea, antiques, and various other precious and staple commodities. The London Stock Exchange is also one of the most important stock bourses in the world.

As Germany's financial center and fifth largest city, Frankfurt is ranked No. 2 in Europe. Frankfurt is not only the symbol of the German financial industry and its highly advanced technology, but is also a hub of currency institutions in Europe. It is home to over 400 banks, 770 insurance companies, and numerous commercial advertising firms. Deutsche Bundesbank, the central bank of Germany, and the Frankfurt Stock Exchange, the third largest stock exchange in Europe, are on the downtown. The Frankfurt Stock Exchange is one of the largest stock

exchanges in the world, in which 85 percent of the country's stock trading takes place. Deutsche Bundesbank, like a sensitive central nerve, impacts on the whole German economy. The European Central Bank and the Deutsche Stock Exchange (Deutsche Boerse) are also located in Frankfurt. Hereby, Frankfurt is referred as the "Manhattan on the banks of River Main."

Paris, the French financial center, is ranked No. 3 in Europe. The financial industry in France boasts a long history; its earliest banks and financial institutions dated back to before the 19th century. The current financial system did not come into being until 1800 when Banque de France was established. At present, there are over 600 financial institutions and nearly 40,000 branches in Paris, with more than 400,000 employees and a total asset of 7 trillion euros. BNP Paribas, Societe Generale, Cr dit Agricole, Groupe Caisse d' pargne, Credit Mutuel, and other major banks account for 93 percent of all banking assets in France.

As the largest Swiss financial center and also a prominent one in Western Europe, Zurich is ranked fourth in Europe. The city is especially strong in service quality and provides an overall environment characterized by stability. Being the hub of hundreds of banks where more than half of which are foreign, Zurich enjoys the title the "city of European millionaires". Banks are lined on both sides of the Stockerstrasse. With the leading amounts of stock exchange transactions in Western Europe, Zurich is home to 70 percent of Western Europe's stock exchange turnover. The Bahnhofstrasse in Zurich is generally considered as the world's richest street. The funds mobilized from this street are above 20 percent of global annual funds. Zurich is also one of the most important

international financial centers and gold markets. The SIX Swiss Exchange is the only stock exchange in the world to incorporate a fully automated trading, clearing, and settlement system. With its advanced equipment and highly professional staff, it provides the investors with an excellent service. The gold market of Zurich is even more world-renowned, but its global status has slipped slightly as it fell behind London in the 1960s to be the world's second largest gold market.

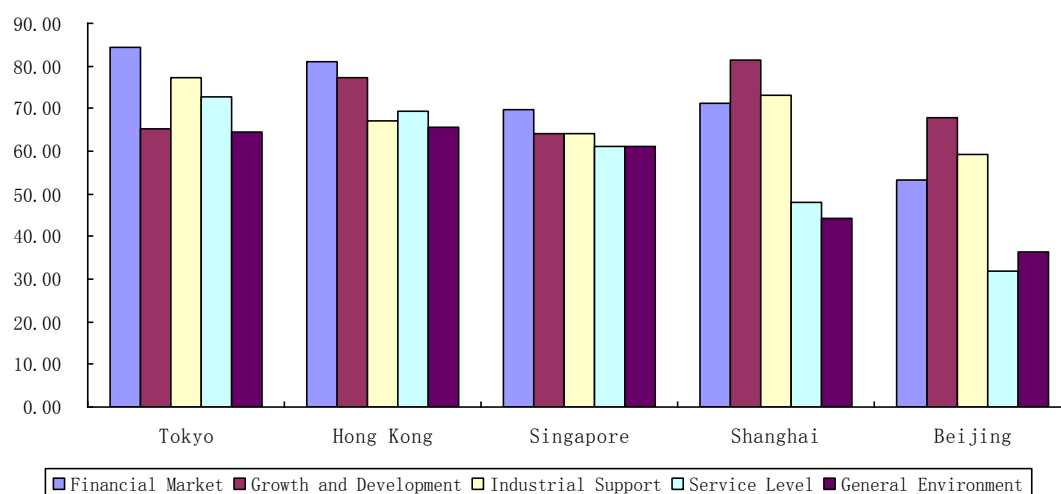
The Dutch financial center Amsterdam is ranked No. 5 in Europe. As the financial and business hub of the Netherlands, Amsterdam is among the best international business centers in the world. Many Dutch business houses and banks are headquartered in Amsterdam including, ABN AMRO Bank, Akzo Nobel, ING Group, Koninklijke Ahold, and Heineken Brouwerijen. Conglomerates like Royal Philips Electronics and KPMG also have their global headquarters close to Amsterdam. As a member of Euronext, the Amsterdam Stock Exchange (AEX) is the oldest in the world and one of the largest

exchanges in Europe.

(IV) Financial centers in Asia-Pacific and Africa

Asia-Pacific and Africa are home to broad emerging markets and lots of developing countries, which are in the process of fast capital accumulation, with latecomers' technological advantage and increasing buying desire from their vast populations. Asia-Pacific and Africa have maintained growth despite global financial crises and the debt crises in developed countries. On one hand, the complementation among developing countries is increasing gradually with trade and direct investment in fast growth. On the other hand, the emerging market economies led by China and India are in the process of transformation and need advanced technologies and equipment, which drives ahead the growth of foreign trade in developed countries.



Figure 6 The Ranking of IFCD 2012 in the Asia-Pacific and Africa**Figure 7 Indicator Scores Comparisons of the Top Five Asian Cities**

As the bellwether of financial centers in the Asia-Pacific region, Tokyo is among world's most important financial markets. Tokyo metropolis is the largest one in the world in terms of economy and population. Statistics show that the Greater Tokyo Area had 35.2 million population in 2008 and 1.9 trillion US dollars of real GDP in 2010 by international exchange rates, almost two times of that of New York. Besides, the Greater Tokyo Area has the most headquarters of Fortune 500 corporations in the world. In 2009, some 51 Fortune 500 companies had their headquarters in the Greater Tokyo Area, almost double of the number in Paris. From the perspective of a financial center, Tokyo has three characteristics advantageous to its development including its close relationship with the internationalization of Japanese Yen, its relationship with fast development of domestic economy, and its relationship with the government-dominated economic drive. But, Tokyo's status as an international financial center has been facing increasing challenges from Shanghai, Singapore, Hong Kong, and other neighboring places.

As a key hub connecting important factor markets, Hong Kong has general acceptance as a global financial center. By the end of 2011, Hong Kong housed 199 foreign banks including 152 locally-licensed ones, 20 restricted license ones, and 26 deposit-taking ones. Plus, 61 foreign banks have representative offices in Hong Kong. Banks in Hong Kong engage in various retail and wholesale banking business including deposit-taking, trade finance, corporate finance, Treasury activities, the trading of precious metals, and security brokerage. Hong Kong has a sound and active foreign exchange market, which enables 24 hours' of daily trading with other parts of the world. Moreover, under the rule of "one country, two systems", 30 percent of China's foreign trade is conducted via Hong Kong and 50 percent of China's foreign direct investment comes from Hong Kong, which is a great advantage bolstering Hong Kong as an international financial center. Hong Kong also has obvious advantages with the openness of its capital account, the transparency of tax and legal

system, its regulatory capacity and experience, its infrastructure, human resources, the depth of its financial products and market, and other aspects.

As a regional transnational financial center, Singapore is the world's fourth largest foreign exchange trading center. Singapore is leading in international finance, trade finance, maritime finance, insurance, and fiscal operations and is also strong in assets and wealth management. Singapore has over 500 local or foreign financial institutions and more than 4,500 companies providing professional services such as auditing, accounting and management consulting, market research, advertisement and public relations, human capital services, and legal services. As one of the richest countries in Asia, Singapore had 260 billion US dollars of GDP in 2011 with per capita GDP at 50,123 US dollars. Meanwhile, Singapore enjoys preference against many countries and regions due to its transparent judiciary and administration, governmental rectitude, political stability, facilitation of infrastructure, low tax rates, access to talent, attractive rental costs, and others.

As a typical financial center from the BRICS countries, Shanghai has its main strength in growth and development. Now, Shanghai municipality has the largest size of financial business among its counterparts on mainland China. The prosperity of financial market in Shanghai is mainly because of its direct financing business, which accounts for more than a quarter of national total volume. Shanghai has the most developed markets of various financial factors and structures in China. In regards of the openness of financial industry, Shanghai has two-thirds of the national headquarters of foreign banks in China and has the national headquarters of

Citigroup, HSBC, Morgan Stanley, Bank of America, Blackstone Group, Deloitte, GE, McKinsey & Company and others. The assets of foreign banks' in Shanghai account for over 80 percent of their total assets in China.

As an indispensable pole in China's financial structure, Beijing shows the great potential for being a financial center. In the first half of 2012, the added-value in Beijing's financial sector increased 12.7 percent year on year to 12.653 billion yuan, accounting for 15.2 percent of Beijing's GDP in the period. Besides, Beijing saw fast growth of trading volume with financial factor markets. The amount of trading from 36 exchanges almost increasing 38 percent year on year. With its unique advantages from headquarter-based finance and finance from the nation's capital city, Beijing has more and more headquarters of equity investment institutions and non-financial companies. In regards to public listed companies, Beijing saw another 18 companies listed on China's main board in Shanghai in the first half of 2012 bringing the total number to 213.

III. Special Analysis on the Development of Financial Centers in BRICS Countries

In recent years, the economic development of the BRICS countries, namely China, Brazil, Russia, India, and South Africa, as representatives of the emerging economies, has recently been under the spotlight worldwide. Since the second half of 2011, the situation of emerging economies have been worsening, especially with the plummet of GDP experienced by the BRICS, the outflow

of capital, substantial depreciation of currencies, and underemployment. Nevertheless, these countries still enjoy abundant foreign currency reserves, relatively low labor costs, large markets, superior industrial foundations, and vital financial markets, all of which are critical for proceeding with the future transformation of the pattern of the world and which are bound to be effective in pushing financial elements to be irresistibly transferred into those countries and regions in an orderly manner.

Considering the current changes in situation and as a response to the requirements of the subject's research, the national financial center development index survey system, based on the three questions about the BRICS countries, is being expanded to explore the state of confidence in development of the national financial center. As regards to the specific research methods, the comprehensive evaluation method shall continue to be followed, grading the questions posed of each city with a score range of 1-5 and making statistical analysis of the results.

I. Confidence analysis

Based on table 20, we can conclude that the confidence scores received by the respondents for the BRICS countries have the following features:

Table20 Comparisons of Confidence Index of the Financial Centers in BRICS countries

	Score 1	Score 2	Score 2	Score 4	Score 5	Comprehensive scores	Ranking 2012	Ranking 2011
Shanghai	2.93	9.14	22.34	40.26	25.34	3.76	1	1
Sao Paulo	6.20	18.23	33.55	28.76	13.26	3.25	2	3
Moscow	6.72	19.73	33.47	27.45	12.63	3.20	3	2
Johannesburg	5.90	20.52	36.96	26.76	9.87	3.14	4	4
Mumbai	8.30	23.32	30.79	26.08	11.51	3.09	5	5

Note: The data from 2nd to 6th column show the proportion of each index in each score, and the unit is percentage.

First and foremost, Shanghai still stands out this year, ranking first and followed by Sao Paulo, Moscow, Johannesburg, and Mumbai.

Secondly, there is a large confidence gap between Shanghai and the other four cities with the second place, Sao Paulo lagging

behind by 0.51, yet the score difference is negligible between other cities.

Thirdly, the scores Shanghai gets mainly alternate between 4 and 5 percent, with the total percentage 65.6, while the rest end up with more percent scores of 3 and 4.

Table 21 Capital attraction index comparison of the BRICS countries

	Score 1	Score 2	Score 3	Score 4	Score 5	Comprehensive Scores	Ranking 2012	Ranking 2011
Shanghai	8.44	11.52	27.27	32.03	20.75	3.45	1	1
Moscow	9.23	18.10	34.26	24.95	13.46	3.15	2	2
Johannesburg	10.75	17.51	36.85	23.05	11.84	3.08	3	3
Sao Paulo	9.63	20.29	34.79	23.71	11.58	3.07	4	4
Mumbai	11.15	21.96	33.40	22.00	11.48	3.01	5	5

Note: The data from 2nd to 6th column show the proportion of each index in each score, and the unit is percentage.

From table 21, we can see that financial centers in BRICS countries attract investments in following pattern: first, Shanghai on the whole takes the lead in terms of the capital attraction among the whole five by achieving a higher score, with the next in ranking order being Moscow, Johannesburg, Sao Paulo and Mumbai.

Secondly, as far as the respondents' grading in terms of confidence level is concerned, Shanghai and Moscow lead the

rankings with Johannesburg, Sao Paulo and Mumbai lagging behind.

III. Analysis of talent attraction

Talent attraction focuses on the comparisons of the degree of attraction of talents among the five countries as financial centers.

Table 22 Comparisons of the talents elements attraction capacity of the financial centers in BRICS countries

	Score 1	Score 2	Score 3	Score 4	Score 5	Comprehensive scores	ranking
Shanghai	7.97	10.96	28.03	31.02	22.01	3.48	1
Sao Paulo	9.86	18.96	35.03	23.35	12.80	3.10	2
Johannesburg	10.75	17.51	36.85	23.05	11.84	3.08	3
Moscow	10.20	19.71	35.40	22.65	12.04	3.07	4
Mumbai	13.21	20.30	32.85	20.68	12.96	3.00	5

Note: The data from 2nd to 6th column show the proportion of each index in each score, and the unit is percentage.

From table 22, we can see that: first, Shanghai is on the whole more attractive to talent than other cities, taking first place among the five, with the ensuing cities, Sao Paulo, Johannesburg, Moscow and Mumbai.

Secondly, as far as the respondents' grading in terms of the five-score confidence level is concerned, Shanghai ranks first with Mumbai, Sao Paulo, Moscow and Johannesburg following behind.

IV. Analysis of internationalization degree of the financial markets

The internationalization of the financial markets focuses mainly on the comparisons of

QDII, QFII, the capital market, and the openness of the capital projects in each city.

From table 23, we can see that: first, Shanghai's scores are on the whole higher than those of other cities, ranking the first among the five. The following ranking is in the order of Johannesburg, Sao Paulo, Moscow and Mumbai.

Secondly, as far as the respondents' grading in terms of the five-score confidence level is concerned, Shanghai takes the lead, followed by Johannesburg, Sao Paulo, Moscow and Mumbai.

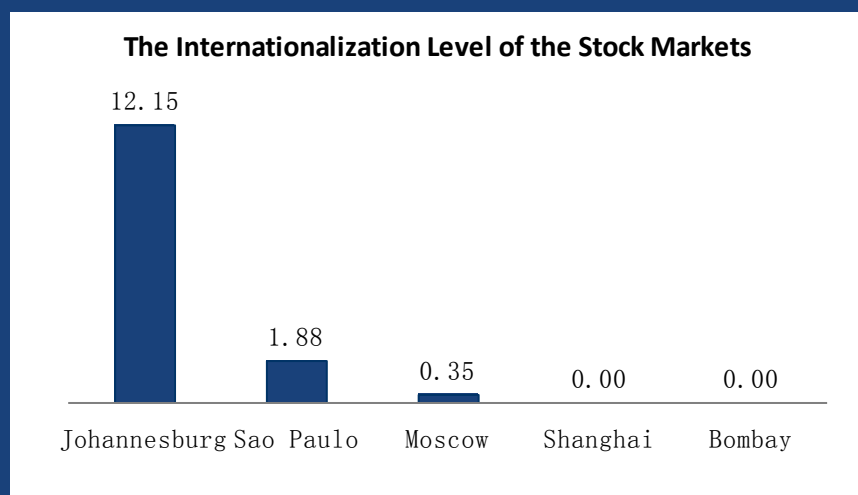
Table 23 Comparisons of internationalization level of the financial markets in BRICS financial centers

	Score 1	Score 2	Score 3	Score 4	Score 5	Comprehensive scores	Ranking
Shanghai	8.40	14.16	30.68	28.23	18.52	3.34	1
Johannesburg	10.39	17.92	36.18	22.93	12.58	3.09	2
Sao Paulo	9.94	18.62	35.89	23.77	11.78	3.09	2
Moscow	10.60	20.37	34.35	22.45	12.22	3.05	4
Mumbai	12.24	19.78	35.41	21.14	11.44	3.00	5

Note: The data from 2nd to 6th column show the proportion of each index in each score, and the unit is percentage.

Special Column: Comparison of the Internationalization Level of the Stock Markets of the Five Cities

The internationalization level of the stock market can be defined as the ratio of the number of foreign companies listed in the city's stock exchange against the total number of listed companies. The stock market of Johannesburg enjoys the highest level of internationalization, followed by Sao Paulo. Moscow also opened its internal market to the foreign companies in 2010. Shanghai and Mumbai fall behind, taking the last two places respectively.



V. Analysis of degree of financial innovation

financial products creativity, financial system creativity, and financial service innovation in each city.

The degree of financial innovation focuses mainly on the comparison of the

Table 24 Comparisons of the degree of financial innovation of the financial centers in BRICS countries

	Score 1	Score 2	Score 3	Score 4	Score 5	Comprehensive scores	ranking
Shanghai	8.71	13.55	30.33	29.29	18.11	3.35	1
Sao Paulo	9.65	20.27	35.73	22.61	11.74	3.07	2
Johannesburg	10.21	19.82	35.57	22.47	11.93	3.06	3
Moscow	10.75	20.23	36.18	21.51	11.33	3.02	4
Mumbai	11.90	20.64	35.06	21.31	11.10	2.99	5

Note: The data from 2nd to 6th column show the proportion of each index in each score, and the unit is percentage.

Special Column: Financial Innovation of the Shanghai Banking Industry

Based on the originality and impact of innovation, the Shanghai Banking Regulatory Bureau classifies the innovations into two levels: major and ordinary. Among the 690 innovations in 2011, 177 were grouped as major, accounting for 25.64 percent, in which 34 are about “financial services for supporting small and micro businesses”, 17 are “strategies for supporting the going out policy”, and 18 are related to “financial market and derivative products”.

The financial innovation of the Shanghai banking industry is characterized by practical products and good services. This is determined by the degree of market development and also indicates the orientation of market need for innovation. Marginal innovation and micro innovation based on original systems, products, and service are the primary means of innovation.

---Data Source: *Shanghai Banking Industry Innovation Report*

From the table 24, we can see that: first, Shanghai has on the whole higher scores than other cities, ranking first among the five, followed by Sao Paulo, Johannesburg, Moscow, and Mumbai.

Secondly, as far as the respondents' grading in terms of the five-score confidence level is concerned, Shanghai takes the lead with Johannesburg, Sao Paulo, Moscow and Mumbai following behind.

VI. Analysis of degree of financing facilities

The degree of financial facilities focuses on comparisons of the degree of facility of financing channels and financing policies in each city.

Table 25 Comparisons of degree of facilities of financial centers in BRICS countries

	Score1	Score2	Score3	Score4	Score5	Comprehensive Score	Ranking
Shanghai	8.85	14.64	31.96	27.44	17.12	3.29	1
Johannesburg	10.01	17.70	37.14	23.74	11.41	3.09	2
Sao Paulo	9.73	19.54	35.49	24.42	10.82	3.07	3
Moscow	11.23	20.67	32.97	23.16	11.98	3.04	4
Mumbai	11.98	20.57	34.41	21.63	11.43	3.00	5

Note: The data from 2nd to 6th column show the proportion of each index in each score, and the unit is percentage.

From table 25, we can see that: first, Shanghai scores on the whole higher than other cities, ranking first among the five, followed by Johannesburg, Sao Paulo, Moscow, and Mumbai.

Moscow, Mumbai, Johannesburg and Sao Paulo following behind.

Secondly, as far as the respondents' gratings in terms of the five-score confidence level are concerned, Shanghai ranks first with

Table 26 Comparisons of Intermediary Service Level of financial centers in BRICS countries

	Score1	Score2	Score3	Score4	Score5	Comprehensive Scores	Ranking
Shanghai	7.51	13.84	32.67	29.55	16.44	3.34	1
Johannesburg	10.09	18.54	35.20	24.68	11.48	3.09	2
Sao Paulo	10.17	19.20	35.34	23.36	11.93	3.08	3
Moscow	10.63	20.60	34.13	22.09	12.54	3.05	4
Mumbai	11.90	22.95	33.91	20.36	10.88	2.95	5

Note: The data from 2nd to 6th column show the proportion of each index in each score, and the unit is percentage.

VII. Analysis of intermediary service level

Intermediary Service Standard focuses on the comparisons of the related intermediary services degree of the financial center construction in each city, including credit rating, investment and financing consultation, financial information, accounting and auditing agency, and asset evaluation.

From table 26, we can see that: first, Shanghai on the whole scores higher than other cities, ranking first among the five, followed by Johannesburg, Sao Paulo, Moscow, and Mumbai.

Secondly, only as far as the respondents' grading in terms of the five-score confidence level is concerned, Shanghai rank the top, followed by Moscow, Sao Paulo, Johannesburg and Mumbai.

The degree of perfection of the financial legal environment focuses on the comparison of the degrees of perfection of the litigation, arbitration, and legal services environment related to financial business disputes, case processing, and so on as well as the soundness of the national and regional financial rules and regulations.

From table 27, we can see that: first, Shanghai scores on the whole higher than other cities, ranking first among the five, followed by Johannesburg, Sao Paulo, Moscow and Mumbai.

Secondly, only as far as the respondents' grading in terms of the five-score confidence level is concerned, Shanghai ranks first with, Sao Paulo, Moscow, Mumbai and Johannesburg following behind.

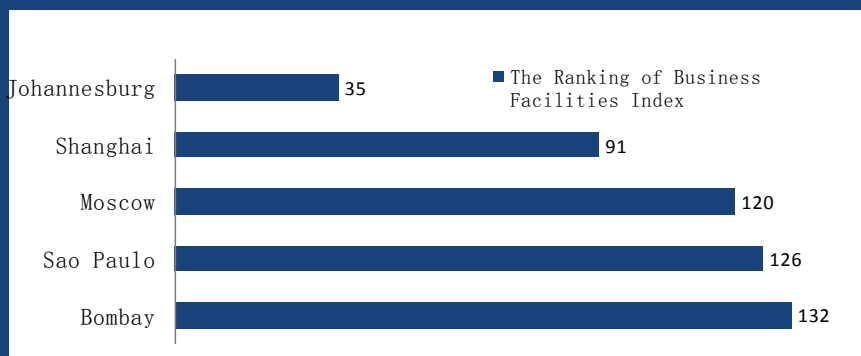
VIII. Analysis of degree of perfection of financial legal environment

Table 27 Comparison of the degree of perfection of the financial legal environment of the financial centers in BRICS countries

	Score 1	Score 2	Score 3	Score 4	Score 5	Comprehensive Scores	Ranking
Shanghai	9.31	15.64	33.01	25.76	16.28	3.24	1
Johannesburg	10.82	19.39	35.73	23.40	10.66	3.04	2
Sao Paulo	10.51	21.72	36.08	20.39	11.30	3.00	3
Moscow	12.42	22.66	33.32	20.66	10.94	2.95	4
Mumbai	13.72	22.90	33.67	19.02	10.69	2.90	5

Special Column: Comparison of the Business Facilities Index in Five Cities

The business facilities index is a ranking index used to measure the benefits of the laws and regulations environment to the businesses. The higher the ranking, the more beneficial the laws and regulations are to businesses.



Data Source: World Bank

Special Column: Accelerated Internationalization of RMB

Shanghai has been one of the pilot cities for conducting cross-border transactions by RMB since April 8, 2009. By the end of 2011, the total amount of Shanghai cross-border transactions in RMB was over 400 billion, nearly four times more than in 2010, indicating a marked acceleration in the internationalization of the RMB. This is one of the fundamental preconditions for the development of Shanghai as an international financial center and the establishment of Shanghai's multi-functional financial center. Particularly, the perfection of the financial market system will promote pilot projects for international settlement in RMB, provide basic support for going international, and help to elevate the status of the RMB in the international currency system to become a "pole" in the future diversification of international currency.

Data Source: Shanghai Head Office of the People's Bank of China

IX. Analysis of degree of currency international recognition

Table 28 Comparison of the currency international recognition index of BRICS countries

	Score 1	Score 2	Score 3	Score 4	Score 5	Currency Knowledge Degree	Ranking 2012	Ranking 2011
RMB(China)	15.09	14.95	25.27	27.25	17.44	3.17	1	1
RBL(Russia)	16.81	19.10	28.25	23.64	12.20	2.95	2	2
Real(Brazil)	17.27	20.72	26.89	22.61	12.50	2.92	3	4
Rupee(India)	18.44	22.25	27.65	20.13	11.54	2.84	4	3
Rand(South Africa)	20.92	23.74	27.75	18.57	9.02	2.71	5	5

Note: column two to column six are the proportion of each index in terms of each score expressed as a percentage.

From table 28, respondents' scores on the currency of BRICS countries are featured by:

Firstly, the RMB is still the most recognizable currency, followed by the Russian ruble, Brazilian real, Indian rupee and South African rand

Secondly, the difference between the RMB and the second place ruble is 0.22, and between the fifth place rand 0.46. The biggest difference among the other four currencies is 0.24. The recognition of the RMB is the highest, which not only has to do with China's economic growth momentum but is also closely related to the Chinese government's reform of the exchange rate mechanism of RMB as well as the promotion of RMB internationalization.

Thirdly, as far as the corresponding scores above 20 percent the five currencies have got in each column are concerned, the RMB and ruble are within the range of 3-4, the rupee and real are 2-4, and the rand is 1-3.

IV. Introduction to Research

Approach of IFCD

(I) General framework

1. Research roadmap

The 2012 Xinhua-Dow Jones International Financial Center Development Index (IFCD2012) continues to adopt the research roadmaps for the IFCD2011 and the IFCD2010. The calculation of the IFCD is based on a subjective questionnaire survey and objective data collection via the global data collection systems of Xinhua News Agency and its strategic cooperation partners. Figure 8 shows the research roadmap for the formation of the IFCD. (Figure 8)

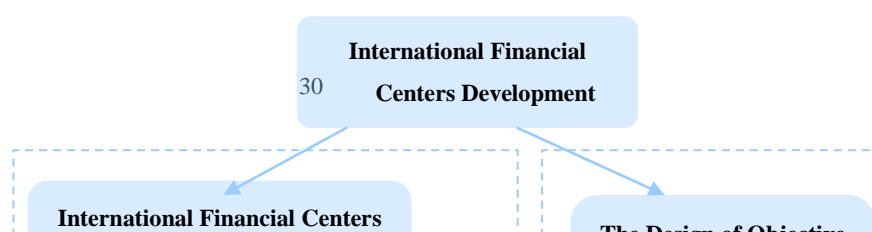


Figure 8 The Research Route Map of IFCD2012**2. Levels of analysis and analytic framework**

In analyzing the index, a multi-level analytic framework is adopted to conduct an all-round analysis on the development situation of the 45 cities as international financial centers. The first level is a comprehensive evaluation of the International Financial Center Development Index based on the different index scores of each city.

The emphasis of the second level analysis is to analyze the advantages and weaknesses of each financial center by breaking down the International Financial Center Development Index and analyzing each element.

The third level is to find out the regional characteristics of these financial centers and examine regional environment's impact on role of international centers.

The last level is a special study on the financial centers of the BRICS countries by reviewing these hot-spots of the world's economic development. The study is based on global respondents' evaluation on the development of the financial centers of the five BRICS countries by conducting subjective questionnaire survey and regional in-depth interviews via Xinhua News Agency's global International Financial Center Development Index survey system.

(II) Construction of objective indicator system**1. Design principles of objective indicator****system**

The design of the indicator system takes the following principles into consideration in order to evaluate the competitiveness of various international financial centers in an objective and fair way:

(1) The principle of systematicness. Each indicator can reflect one of the features of an international financial center. Various indicators jointly constitute the systematic index system, and try to reflect the connotation of financial centers from as many aspects as possible;

(2) Representativeness of indicators. The selection of each indicator strives to reflect features of international financial centers, and avoid overlap between indicators. Each indicator is distinct from others, so as to guarantee the index is representative and has comparability;

(3) Relatively independence of indicators. Each indicator has clear connotation and is relatively independent. One indicator does not overlap with another, and indicators do not possess reciprocal causation relations;

(4) The principle of operability. The design of the index system gives full consideration to the stability of data sources, the standardization and continuity of data, and unified standards in order to ensure convenience in data collection and calculation, and clarification of the appraisal indicator's connotations.

2. Structure of indicator system

Based on the above principles, the Xinhua-Dow Jones International Financial Center Development Index is formed by a three-level indicator system. The first-level indicator is made up by five aspects, including financial market, growth and development, industrial support, service standard and general environment of a country. Of the five elements, financial market is the measure of core development ability of an international financial center; growth and development is a measure of impetus origin of an international financial center; industrial support is a measure of an international financial center's development channel; service standard is a measure of international financial center's development ability; and the general environment is a measure of the environment's impact on the development of an international financial center. Figure 9 shows the structure of the five aspects. The first-level indicators of the IFCD2012 are

consistent with those in the IFCD2011, reflecting the continuity in index formation.

The first-level indicator of financial market includes four secondary indicators and 16 third-level indicators, mainly reflecting the scale, stability and maturity of capital market, forex market, banking market, and insurance market. The secondary indicators of the IFCD2012 are consistent with those in the IFCD2011; within the third-level indicators, the indicator of "insurance service network" which was used in the IFCD2011 is replaced by "the insurance service standard" in IFCD2012 due to availability of data. Except for this indicator, other third-level indicators of the IFCD2012 are consistent with those in the IFCD2011.

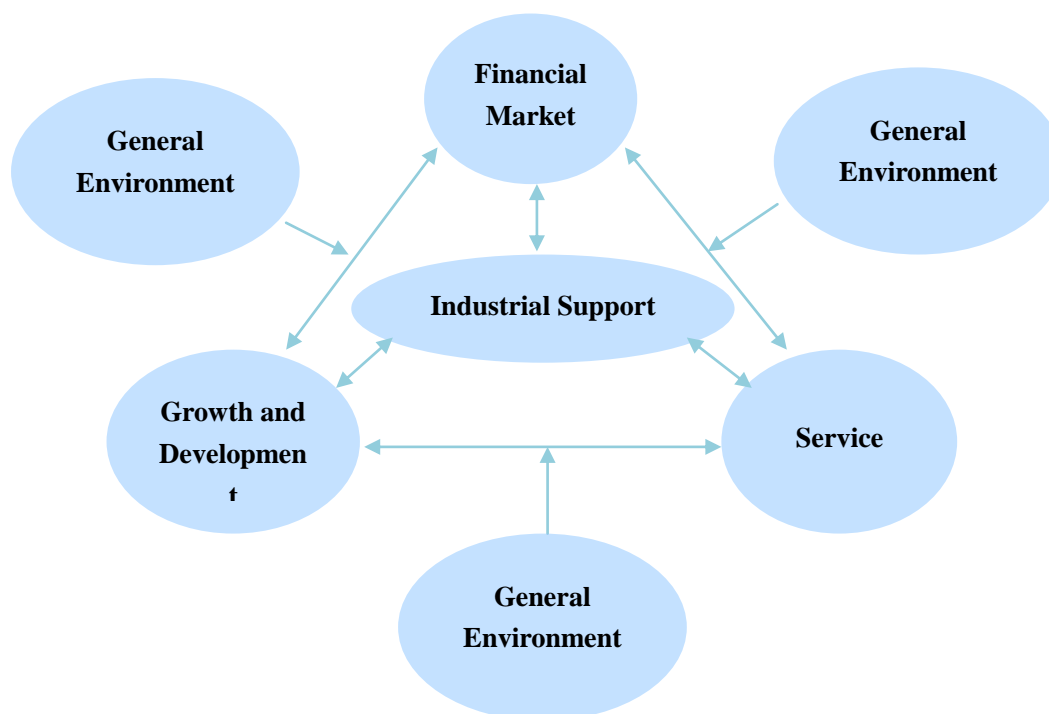


Figure 9 Indicator System of IFCD2012

The first-level indicator of growth and development includes four secondary indicators and 14 third-level indicators, evaluating a city's growing and development capability from four aspects, namely the growth potential of the capital market, growth potential of the economy, the city's current innovation output, and innovation potential. The secondary indicators are in consistence with those in the IFCD2011; of the third-level indicators, the indicator of "annual growth rate of the number of the R&D staff in the past five years" in the IFCD2011 is replaced by "the growth rate of R&D staff per million in the past five years", and the indicator of "technology and innovation" in the IFCD2011 is replaced by "innovation index"; except for these two indicators, other third-level indicators are consistent with those in the IFCD2011.

The first-level indicator of industrial support is made up by three secondary indicators and 12 third-level indicators, evaluating the capability of a financial supporting system from three aspects, namely the commercial environment of a region, a city's basic conditions, and the city's current infrastructure. The secondary indicators are consistent with those in the IFCD2011; of the third-level indicators, the indicator of "strength of high-tech companies" is replaced by "proportion of exports by high-tech companies in the exports of manufacturing sector" due to availability of data. Except for this indicator, other third-level indicators are in consistence with those in the IFCD2011.

The first-level indicator of service standard includes three secondary indicators and 12 third-level indicators, evaluating the service ability of a region's financial development from three aspects, namely government service standard, intellectual

capital, and city environment. The secondary and third-level indicators are consistent with those in the IFCD2011.

The first-level indicator of general environment includes three secondary indicators and 12 third-level indicators, evaluating the region's general development in terms of economic environment, political environment, and the degree of opening to the outside. The secondary indicators are consistent with those in the IFCD2011; of the third-level indicators, the indicator of "corruption perception index" is replaced by "integrity index" due to availability of data. Except for this indicator, other third-level indicators are in consistence with those in the IFCD2011.

3. Weight of indicators

Within the IFCD2012 indicator system, the weight of the first-level indicators is calculated via questionnaire survey. In the survey, the respondents give scores to five aspects, including the financial market, growth and development, industrial support, service standard and a country's general environment, in terms of importance in order to measure the competitiveness of the financial centers. Score one indicates "not important", and the score five indicates "very important". By calculating the scores from 3016 valid questionnaires, the weights of the five first-level indicators can be worked out, which is shown in the Table 29. The weights of the first-level indicators in the IFCD2012 are identical with those in the IFCD2011, which shows that the importance of the financial market, growth and development, industrial support, service standard and a country's general environment to an international financial center is widely accepted.

Table 29 Weights of the first-level indicators in the IFCD2012

Financial market	Growth and Development	Industrial Support	Service standard	General environment
0.21	0.21	0.19	0.20	0.20

Note: Sum of the weighted value of five indicators is less than 1 is because of round-off error

Within the IFCD2012 indicator system, the secondary indicators and the third-level indicators are given equal weight, that is to say, each secondary indicator under each first-level indicator is given equal weight, and each third-level indicator under each secondary indicator is also given equal weight. By doing so, each element's influence on the development of each international financial center can be reflected in a comprehensive, objective and fair way.

4. Data collection

Data of the objective indicators in the IFCD2012 come from the following channels:

(1) Data released by international authoritative institutions, such as reports released by the World Bank, the World Economic Forum, and the International Monetary Fund;

(2) Data released by world well-known companies, stock exchanges and authoritative websites;

(3) Data from the global surveys by Xinhua News Agency and its strategic cooperation partners;

(4) Research data published by well-known research institutions.

Generally speaking, the data of the IFCD2012 indicator system are authoritative, objective, stable and reliable. At the same time, the objective data are mostly adopting average figures in the recent three years to reduce the influence of incomparable interference factors.

(III) Subjective survey approaches

1. Global questionnaire survey

The objective indicators evaluate the hard power of international financial centers and reflect the core foundation for the development of international financial centers. But objective indicators do not provide a complete evaluation. As a hub for capital flows, such soft strength for a financial center as environment, popularity, and attractiveness can not be neglected. Therefore, the IFCD2012 employs Xinhua News Agency's global information collection network and the survey network of Xinhua's cooperative partner, Nielsen Company, and develops and establishes the global international financial center city questionnaire survey system to measure an international financial center's soft strength in a complete and scientific way.

Data of the questionnaire survey come from Xinhua News Agency's global information collection network and Nielsen Company's survey network. The survey includes the following major aspects:

(1) Subjective scores on 45 sample cities in five aspects, including the financial market, growth and development, industrial support, service standard, and the general environment of a country;

(2) Subjective evaluation on the

importance of the five aspects, namely the financial market, growth and development, industrial support, service standard and the general environment of a country;

(3) Confidence survey on the development of financial centers in BRICS countries.

It is worth highlighting that the full use of Xinhua News Agency's global information collection network ensured the quality of the data obtained.

2. In-depth interviews with experts

The introduction of in-depth interviews is an innovative breakthrough in the subjective survey of the IFCD2012. Experts such as senior government officials and senior management of financial industry are familiar with global financial market and have authority in local regions. By using Xinhua News Agency's vast global information collection network, the in-depth interviews can measure the soft strength of an international financial center in a comprehensive and scientific way. The in-depth interviews include the following aspects:

(1) The economy and financial development situation of the city where the interviewee locates;

(2) Interviewee's understanding and evaluation on major international financial centers;

(3) Interviewee's evaluation on the international financial centers of the BRICS countries;

(4) Interviewee's outlook for the future development of international financial centers.

(IV) Comprehensive analysis approach of IFCD indicators

The calculation of the IFCD2012 is adopted a symmetric design competitiveness model, which highlights the direct and concise information integration and the scientific nature of the evaluation structure. The model establishes a data processing platform with unified standards, combines both the subjective survey data and the objective indicator data, and calculates the overall index which can comprehensively reflect the development of the international financial centers. The detailed analyzing process is shown in Figure 10.

First, based on the positive and negative attributes of the indicators, data will be processed to be comparable so as to work out the comparable data for each indicator, that is, to provide the function values in normal distribution after standardized original data, so as to describe the data properly and avoid impact from extreme values.

Secondly, an element evaluation index and a comprehensive evaluation index are calculated via two-level summarizing at equal weight supported by symmetric design. The score value of each secondary indicator is from the summarization and calculation of the score value of third-level indicators by the same weight. Equal weight calculation is also adopted when summarizing and calculating the secondary indicators into first-level indicators. The objective score of each first-level indicator is from the summarization and calculation of the secondary indicators by the same weight.

Thirdly, the final score for each first-level indicator is obtained by calculating the arithmetical average of the score for the first-level indicator by using the objective data

and the score for the first-level indicator by using data from the subjective questionnaire survey.

Finally, the total score for each city is obtained by calculating the weighted average

of the scores of first-level indicators on the basis of the weights obtained from the questionnaire survey. Then the ranking for each city is based on the total score for each city.

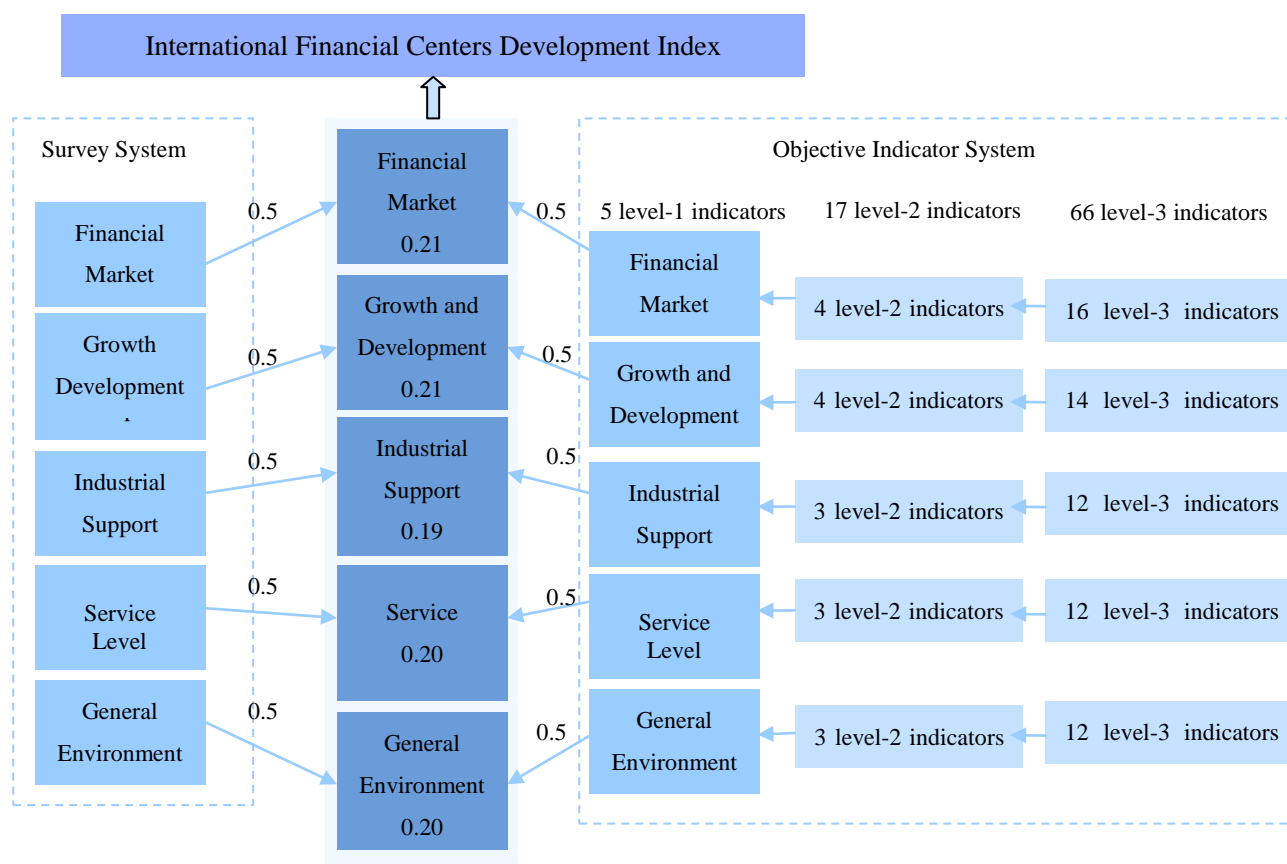
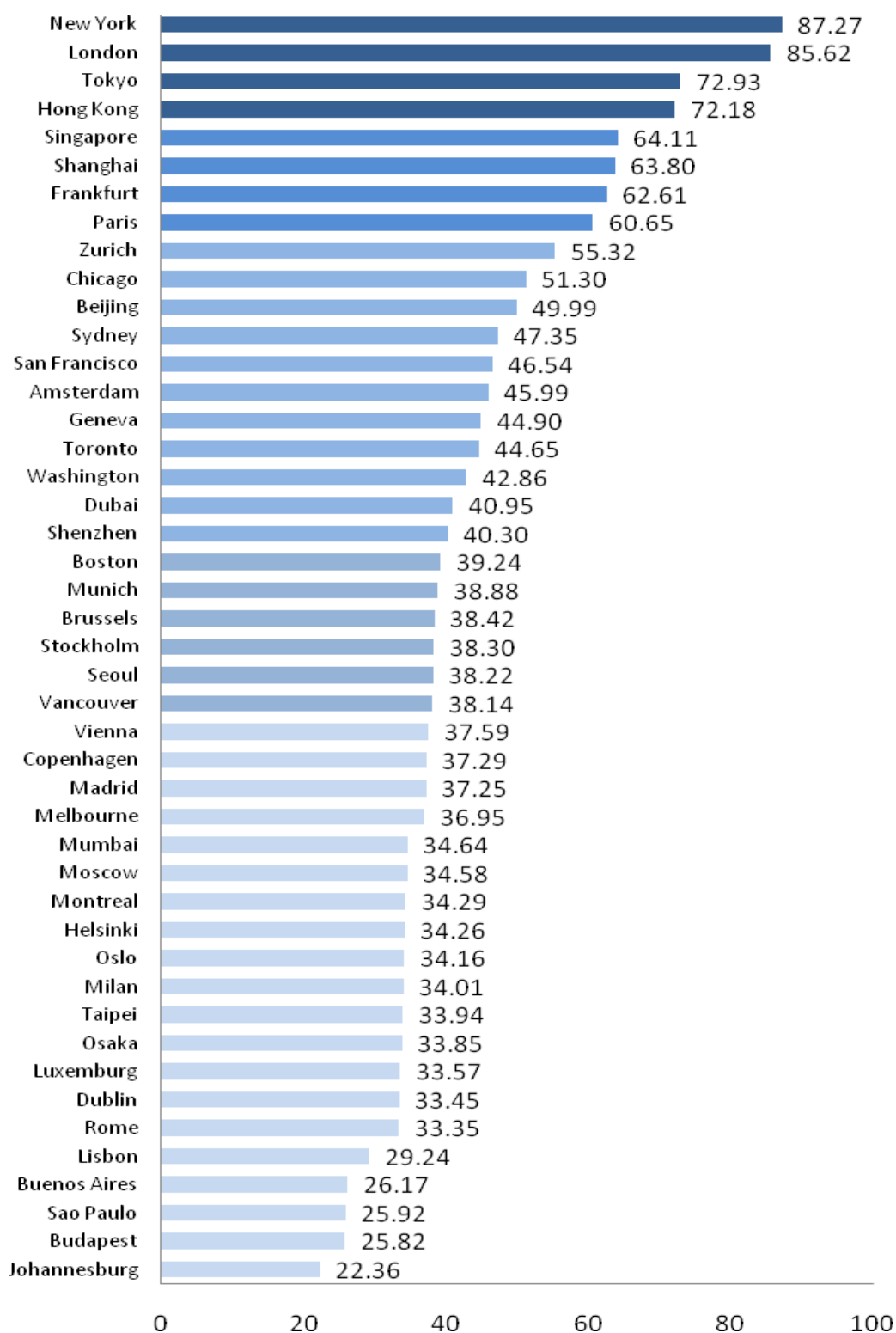


Figure 10 Construction Structure of IFCD2012

Appendix I: Figures and Tables of IFCD2012

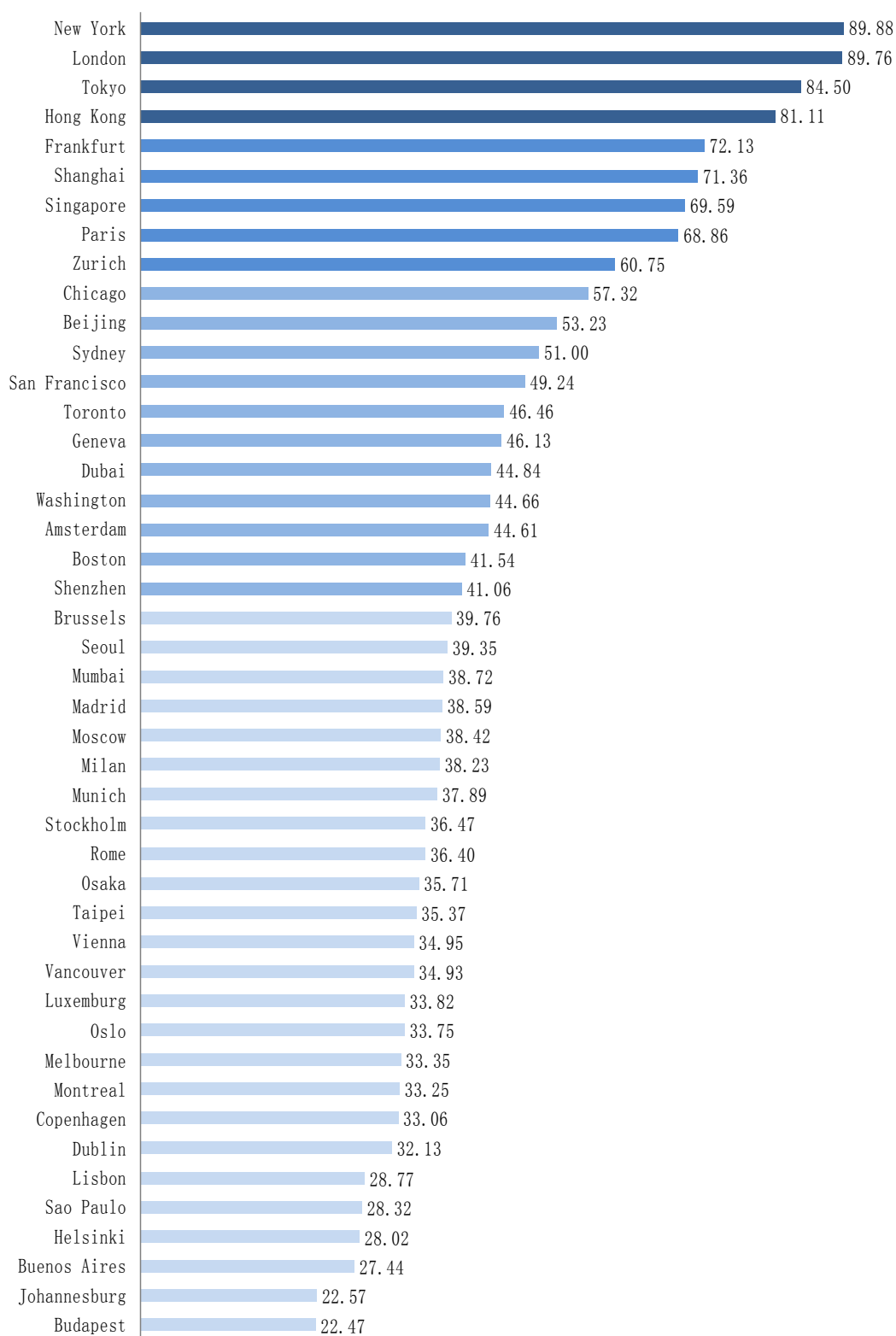


Attached Figure 1 Results of IFCD 2012

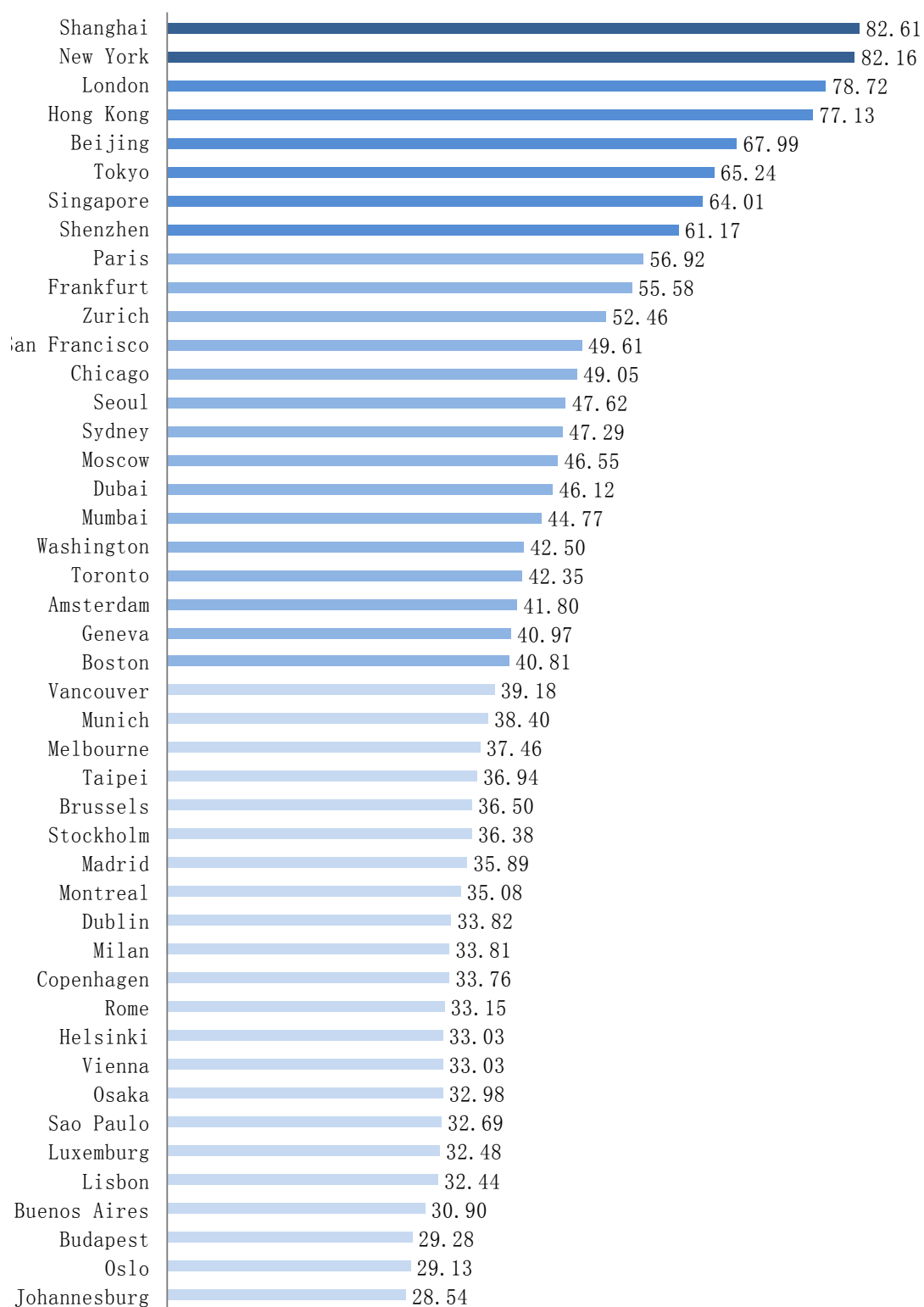
Attached Table1 Ranking Comparison of IFCD2012 and IFCD2011

CITY	Financial Market		Growth and Development		Industrial Support		Service Level		General Environment		IFCD		Change in rank	ABS of change in rank
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011		
New York	1	1	2	4	1	1	1	1	1	2	1	1	0	0
London	2	2	3	7	2	3	2	2	2	1	2	2	0	0
Tokyo	3	3	6	3	3	2	3	3	5	3	3	3	0	0
Hong Kong	4	4	4	2	5	4	4	4	3	4	4	4	0	0
Singapore	7	8	7	5	6	5	6	6	6	6	5	5	0	0
Shanghai	6	7	1	1	4	6	12	7	16	19	6	6	0	0
Frankfurt	5	6	10	12	7	8	7	8	4	8	7	8	1	1
Paris	8	5	9	14	9	7	5	5	8	5	8	7	-1	1
Zurich	9	11	11	23	12	17	8	10	7	11	9	12	3	3
Chicago	10	10	13	19	10	10	9	14	13	13	10	11	1	1
Beijing	11	9	5	6	8	9	35	34	27	30	11	14	3	3
Sydney	12	12	15	13	14	12	10	11	12	9	12	9	-3	3
San Francisco	13	18	12	18	13	19	14	16	19	16	13	17	4	4
Amsterdam	18	16	21	17	11	13	13	13	10	7	14	10	-4	4
Geneva	15	14	22	24	27	18	11	9	9	10	15	15	0	0
Toronto	14	21	20	26	18	20	15	15	11	15	16	18	2	2
Washington	17	13	19	21	19	14	16	12	20	12	17	13	-4	4
Dubai	16	15	17	8	16	11	27	18	32	29	18	16	-2	2
Shenzhen	20	19	8	10	17	15	40	35	36	35	19	21	2	2
Boston	19	17	23	22	29	22	17	22	28	26	20	20	0	0
Munich	27	22	25	27	21	21	26	20	22	20	21	19	-2	2
Brussels	21	23	28	29	35	25	22	24	21	22	22	25	3	3

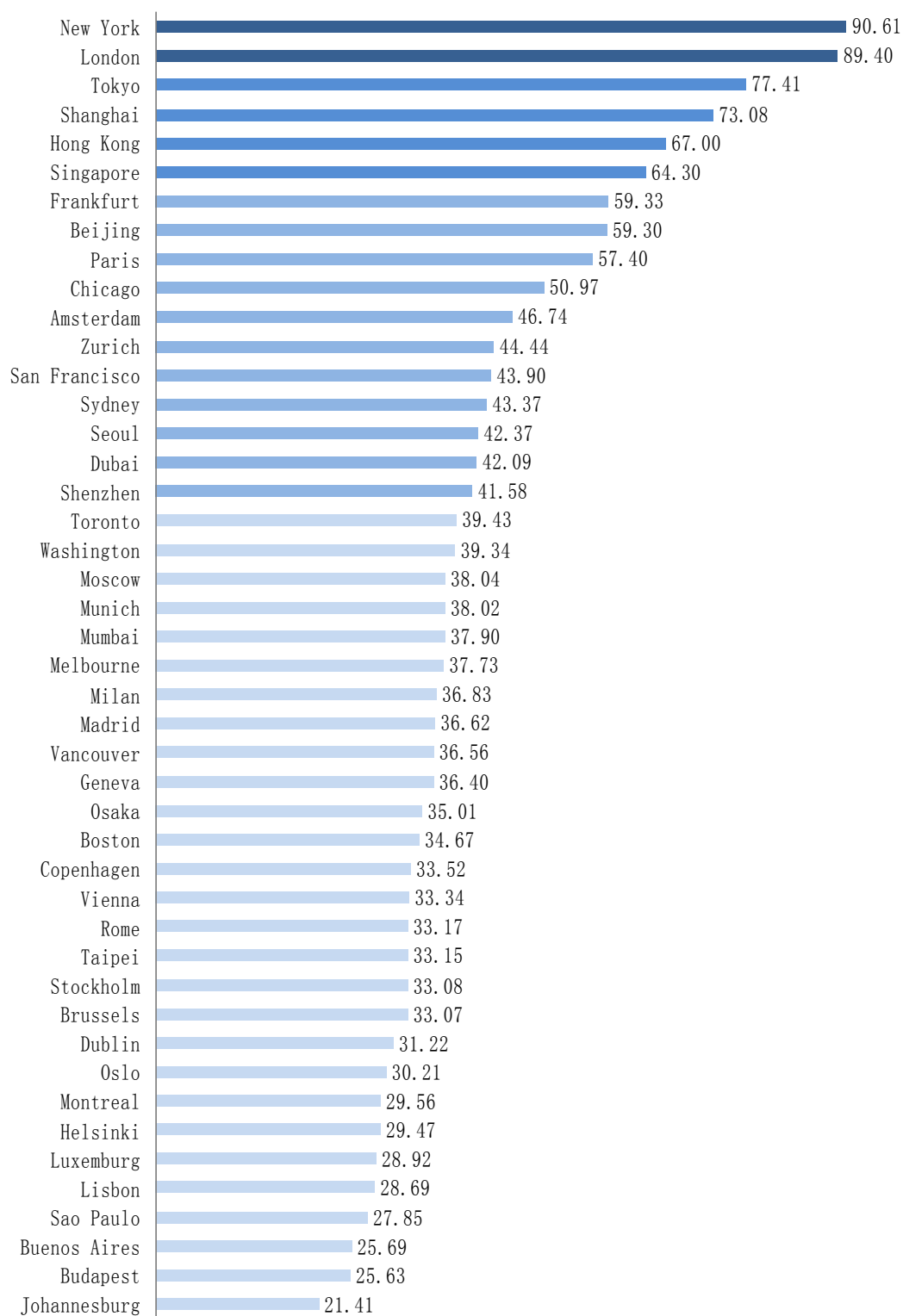
Stockholm	28	35	29	32	34	27	18	19	17	17	23	23	0	0
Seoul	22	26	14	9	15	16	37	36	35	34	24	24	0	0
Vancouver	33	39	24	36	26	29	24	25	23	21	25	27	2	2
Vienna	32	37	37	43	31	37	19	23	14	23	26	28	2	2
Copenhagen	38	27	34	39	30	28	20	17	15	14	27	22	-5	5
Madrid	24	30	30	28	25	33	25	28	30	31	28	32	4	4
Melbourne	36	33	26	38	23	30	23	30	26	27	29	31	2	2
Mumbai	23	20	18	11	22	40	39	38	41	39	30	34	4	4
Moscow	25	24	16	15	20	23	41	39	43	42	31	35	4	4
Montreal	37	38	31	41	38	35	30	33	25	24	32	33	1	1
Helsinki	42	41	36	35	39	39	21	26	24	25	33	30	-3	3
Oslo	35	34	44	45	37	32	32	21	18	18	34	26	-8	8
Milan	26	25	33	25	24	24	33	31	39	38	35	36	1	1
Taipei	31	29	27	20	33	38	36	40	33	37	36	40	4	4
Osaka	30	32	38	37	28	26	34	37	34	33	37	38	1	1
Luxemburg	34	28	40	33	40	34	28	27	29	28	38	29	-9	9
Dublin	39	31	32	40	36	36	31	32	31	32	39	39	0	0
Rome	29	36	35	30	32	31	29	29	37	36	40	37	-3	3
Lisbon	40	43	41	42	41	45	38	43	38	40	41	44	3	3
Buenos Aires	43	42	42	34	43	42	43	44	42	44	42	42	0	0
Sao Paulo	41	40	39	16	42	41	45	45	44	43	43	41	-2	2
Budapest	45	45	43	44	44	43	42	41	40	41	44	43	-1	1
Johannesburg	44	44	45	31	45	44	44	42	45	45	45	45	0	0



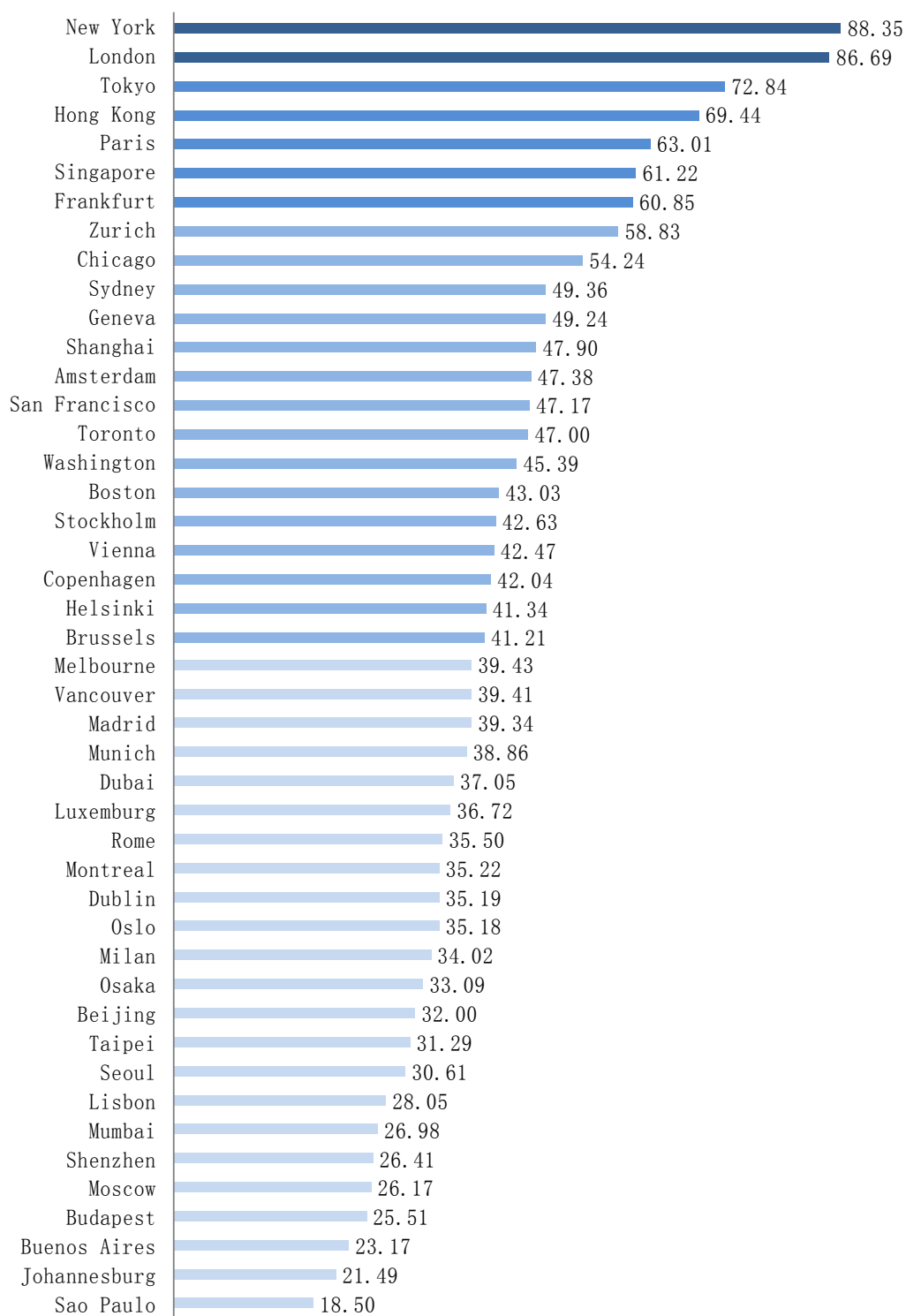
Attached Figure 2 The Financial Market Ranking of IFCD2012



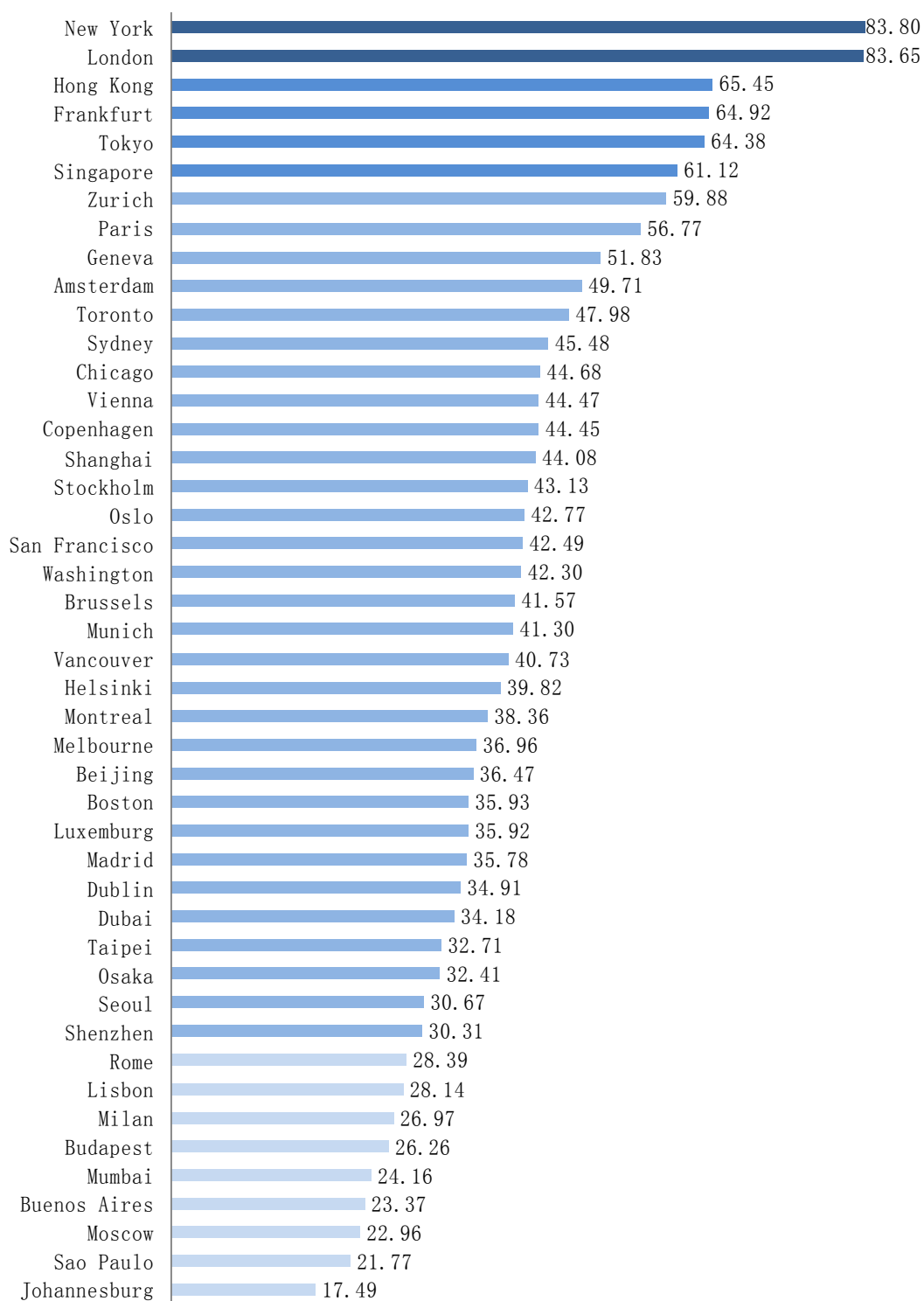
Attached Figure 3 The Growth and Development Ranking of IFCD2012



Attached Figure 4 The Industrial Support Ranking of IFCD2012



Attached Figure 5 The Service level Ranking of IFCD2012



Attached Figure 6 The General Environment Ranking of IFCD2012

Appendix II: IFCD Survey System

(I) About the questionnaires

The data for index analysis in 2012 comes from the Global Information Survey System of Xinhua and the AC Nielsen Global Survey. After examining quality of data and deleting questionnaires with data of poor quality, we received 3,016 valid questionnaires with high-quality data. The selection of samples follows the following standards:

Firstly, professionals of financial industry account for about 70 percent of the total;

Secondly, senior executives account for about 60 percent;

Thirdly, the regional distribution of the samples adopts equal weight for the 45 sampled cities;

Fourthly, the amount of samples meets

professional statistical requirements.

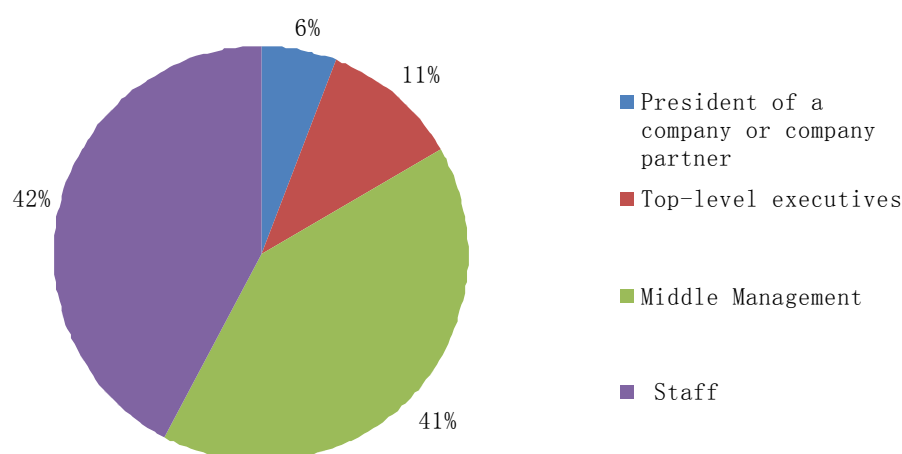
(II) Basic information of questionnaires

1. Job title

Of the 3,016 questionnaires, the profile of jobs of respondents is pyramid shaped. Survey respondents holding higher positions account for a lower proportion of total respondents. Common employees take the highest share, accounting for 42.3 percent of the total survey respondents.

2. Industries worked in by respondents

Some 22.6 percent of survey respondents are engaged in government bodies, the highest level among all the respondents. Aside from regulatory bodies and the central bank that takes a proportion of less than 2 percent, all the remaining industries account for 4 to 13 percent.



Attached Figure 7 Distribution of Respondents' Job Title

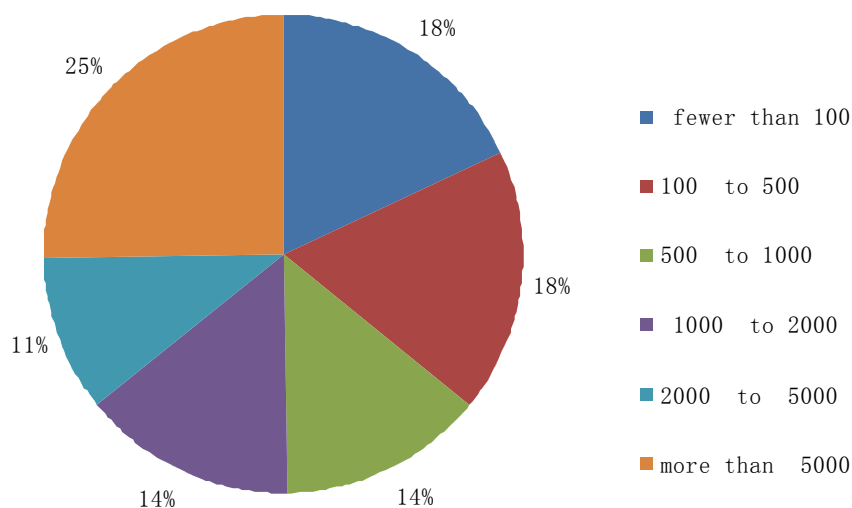
Attached Table 2 Industries worked in by respondents

Industry	Count	Proportion (%)
Investment Bank	137	4.5
Commercial Bank	252	8.4
Retail Bank	230	7.6
Insurance	266	8.8
Asset Management	228	7.6
Legal Services	169	5.6
Accounting Services	376	12.5
Trade Association	354	11.7
Regulatory Bodies/ Central Bank	41	1.4
Government Bodies	683	22.6
Scientific & Research Institutions	280	9.3
Others	0	0.0
Total	3016	100.0

3. Location of headquarters of respondents' workplaces

There are 44 cities, where headquarters of organizations of survey respondents are located, with number of statistics samples

exceeding or equaling 10. Except Guangzhou of China, the other 43 cities are all in the scope of the 45 cities surveyed.

**Attached Figure 8 Distribution of Respondents' Organization Size**

Attached Table 3 Locations of questionnaires' respondents

City	Sample Amount	Ratio (%)	City	Sample Amount	Ratio (%)
London	96	3.18	Mumbai	55	1.82
Tokyo	91	3.02	Montreal	53	1.76
New York	84	2.79	Helsinki	52	1.72
Beijing	81	2.69	Osaka	46	1.53
Madrid	77	2.55	Shenzhen	45	1.49
Paris	73	2.42	Budapest	44	1.46
Seoul	72	2.39	Copenhagen	43	1.43
Taipei	71	2.35	Chicago	42	1.39
Hong Kong	69	2.29	Buenos Aires	41	1.36
Vienna	68	2.25	Shanghai	41	1.36
Dublin	67	2.22	Vancouver	40	1.33
Moscow	67	2.22	Singapore	40	1.33
Toronto	67	2.22	Oslo	37	1.23
Zurich	66	2.19	Brussels	37	1.23
Rome	63	2.09	Frankfurt	37	1.23
Stockholm	63	2.09	Amsterdam	36	1.19
Melbourne	63	2.09	San Francisco	33	1.09
Munich	62	2.06	Boston	24	0.80
Washington	61	2.02	Dubai	16	0.53
Sydney	61	2.02	Geneva	13	0.43
Lisbon	57	1.89	Luxemburg	1	0.03
Milan	57	1.89	Johannesburg	0	0.00
Sao Paulo	57	1.89	Others and Omissions	647	21.45
			Total	3016	100.00

4. Number of employees across the world

Of the organizations where the survey respondents work in, those with more than 5,000 staff take the highest proportion, accounting for 25.4 percent. Organizations with less than 100 staff account for 18.1 percent. Proportion of organizations with staff account from 100 to 500 ranks the third, at 17.8 percent. And the other three types of organizations respectively account for about 10 to 15 percent. It shows that scale of surveyed organizations is relatively even.

(III) Further analysis**1. Valuation of each factor by respondents from various industries**

Altogether 3,016 questionnaires could be taken as samples are left. In terms of occupation classification, we classify survey respondents engaged in investment banking, commercial banking, retail banking, insurance, asset management, and regulatory bodies and the central bank into personnel involved in financial institutions. Other survey respondents are classified as non-financial institution staff. We finally obtained 1,154

questionnaires from financial cycle and 1,862 questionnaires from non-financial respondents.

Adopting the same analysis method with the previous two years, we planned to list the top 15 cities respectively picked up by

financial and non-financial institution staff, in order to directly collect the valuation of survey respondents in various occupations on the financial center development indicators of the world's major cities.

Attached Table4 Financial and non-financial institution staff's valuation of financial markets

Ranking	Financial Staff		Non-financial Staff	
	City	Ratio	City	Ratio
1	London	0.673	New York	0.675
2	New York	0.667	London	0.610
3	Hong Kong	0.623	Tokyo	0.581
4	Tokyo	0.613	Hong Kong	0.558
5	Singapore	0.583	Singapore	0.543
6	Frankfurt	0.553	Frankfurt	0.500
7	Zurich	0.543	Toronto	0.468
8	Toronto	0.536	Zurich	0.467
9	Boston	0.527	Boston	0.467
10	San Francisco	0.525	Paris	0.458
11	Chicago	0.512	Sydney	0.458
12	Geneva	0.509	Chicago	0.457
13	Paris	0.504	Shanghai	0.440
14	Washington	0.488	Washington	0.439
15	Luxemburg	0.467	Geneva	0.430

Note: The "Ratio" in the table is the ratio of the number of responses that the city has excellent performance to the total number of respondents

From attached table 4 we know that, the responses of financial and non-financial institution staff show no significant difference when evaluating the top 9 cities' performance in terms of their financial markets, which reflects that these cities' importance as international financial center has gained great recognition. Financial staff's acceptance of San Francisco, Geneva, and Luxembourg is higher than that of non-financial staff; while their acceptance of Paris, Sydney and Shanghai is lower than that of non-financial staff.

Attached Table 5 Financial and non-financial institution staff's valuation of growth and development

Ranking	Financial Staff		Non-financial Staff	
	City	Ratio	City	Ratio
1	Shanghai	0.583	Shanghai	0.562
2	Dubai	0.566	Shenzhen	0.561
3	Shenzhen	0.560	Beijing	0.548
4	Beijing	0.547	Seoul	0.526
5	Singapore	0.541	Mumbai	0.516
6	Hong Kong	0.527	Singapore	0.502
7	Vancouver	0.516	Hong Kong	0.467
8	Mumbai	0.504	San Francisco	0.465
9	Sao Paulo	0.494	Taipei	0.464
10	Zurich	0.447	Dubai	0.452
11	San Francisco	0.444	Moscow	0.447
12	Boston	0.436	Sao Paulo	0.440
13	Johannesburg	0.436	New York	0.433
14	Seoul	0.435	Johannesburg	0.427
15	Sydney	0.431	Toronto	0.405

As shown in attached table 5, financial and non-financial institution staff have a relatively consistent recognition of Shanghai, Shenzhen, Beijing, Singapore, Hong Kong, and Johannesburg in terms of growth and development; financial staff's acceptance of Dubai, Vancouver, Sao Paulo and Zurich is higher than that of non-financial staff; while their acceptance of Seoul, Mumbai, San Francisco, Taipei, Moscow, and Toronto is lower than that of non-financial staff.

As shown in attached table 6,, financial and non-financial institution staff has relatively large differences of opinion about industrial support, and their opinions post small differences on the recognition of Beijing, Tokyo, Seoul, Osaka, New York, and London. Financial staff post a higher recognition of such cities as Vancouver, Tokyo, Singapore, Hong Kong, Boston, and Washington; while non-financial staff exhibit higher recognition of Frankfurt, Helsinki, Shanghai, Chicago, and Munich.

Attached Table 6 Financial and non-financial institution staff's valuation of industrial support

Ranking	Financial Staff		Non-financial Staff	
	City	Ratio	City	Ratio
1	Vancouver	0.524	Frankfurt	0.671
2	Tokyo	0.514	Helsinki	0.417
3	Singapore	0.500	Seoul	0.417
4	Beijing	0.483	Shanghai	0.413
5	Seoul	0.470	Beijing	0.406
6	Hong Kong	0.466	Tokyo	0.405
7	Boston	0.464	New York	0.383
8	Osaka	0.462	Chicago	0.382
9	New York	0.455	Munich	0.382
10	Washington	0.453	Osaka	0.378
11	Dubai	0.450	Singapore	0.368
12	Toronto	0.450	Mumbai	0.366
13	Munich	0.450	Amsterdam	0.360
14	Mumbai	0.442	Shenzhen	0.358
15	London	0.440	London	0.356

Attached Table 7 Financial and non-financial institution staff's valuation of service standard

Ranking	Financial Staff		Non-financial Staff	
	City	Ratio	City	Ratio
1	Hong Kong	0.486	Tokyo	0.445
2	Zurich	0.477	Helsinki	0.399
3	Taipei	0.468	Melbourne	0.398
4	Singapore	0.463	Stockholm	0.389
5	Tokyo	0.440	Paris	0.387
6	Frankfurt	0.435	Hong Kong	0.379
7	Paris	0.426	Osaka	0.378
8	Washington	0.424	Toronto	0.377
9	New York	0.420	London	0.375
10	Vancouver	0.419	Singapore	0.375
11	Geneva	0.415	Sydney	0.375
12	Munich	0.412	Vienna	0.372
13	San Francisco	0.407	New York	0.371
14	Toronto	0.407	Vancouver	0.369
15	London	0.404	Zurich	0.366

Concluded from attached table 7, financial and non-financial institution staffs also have relatively great differences of opinion about service standard. Financial staff post higher recognition of such cities as Hong

Kong, Zurich, Taipei, Singapore, and Tokyo; while non-financial staff exhibit higher recognition of Tokyo, Helsinki, Melbourne, Stockholm, and Paris.

Attached Table 8 Financial and non-financial institution staff's valuation of the country's general environment

Ranking	Financial Staff		Non-financial Staff	
	City	Ratio	City	Ratio
1	Frankfurt	0.732	Oslo	0.423
2	New York	0.467	Geneva	0.409
3	Toronto	0.443	Toronto	0.409
4	Zurich	0.437	Vienna	0.403
5	London	0.420	Zurich	0.397
6	Copenhagen	0.418	New York	0.396
7	Singapore	0.417	Copenhagen	0.394
8	Hong Kong	0.412	London	0.386
9	Geneva	0.409	Washington	0.382
10	Vancouver	0.395	Sydney	0.379
11	Budapest	0.395	Stockholm	0.374
12	Washington	0.390	Paris	0.359
13	Tokyo	0.387	Frankfurt	0.357
14	Montreal	0.385	Helsinki	0.356
15	Boston	0.382	Singapore	0.354

As attached table 8 shows that financial and non-financial institution staff's opinions also diverge on the country's general environment. Financial staff post higher recognition of such cities as Frankfurt, New York, Toronto, Zurich, and London; while non-financial staff exhibit higher recognition of Oslo, Geneva, Toronto, Vienna, and Zurich.

2. Valuations of each factor by respondents from various regions

Excluding 647 samples not filed in the cities where the headquarters of survey respondents' organizations are located from the 3,016 valid questionnaires, 2,369 effective samples are left. As fewer headquarters of survey respondents' organizations are located in South America, Oceania, and Africa, we combined the three continents and obtained the detailed location of samples in attached table 9.

Attached Table 9 Continents headquarters of survey respondents' organizations located

Region	Sample amount	Proportion (%)
Europe	1116	47.1
North America	404	17.0
Asia	627	26.5
South America, Oceania and Africa	222	9.4

Attached Table 10 Valuations of financial markets by respondents from various regions

Ranking	Europe		North America		Asia		Other Continents	
	City	Ratio	City	Ratio	City	Ratio	City	Ratio
1	London	0.66	Hong Kong	0.72	New York	0.67	Osaka	1.00
2	New York	0.66	New York	0.72	London	0.62	Lisbon	0.80
3	Frankfurt	0.61	Tokyo	0.68	Tokyo	0.61	Singapore	0.79
4	Zurich	0.58	Singapore	0.68	Hong Kong	0.57	Hong Kong	0.71
5	Tokyo	0.57	London	0.66	Singapore	0.54	Frankfurt	0.70
6	Boston	0.56	Toronto	0.64	Washington	0.51	Vancouver	0.67
7	Luxemburg	0.55	Stockholm	0.64	Shanghai	0.47	New York	0.66
8	Hong Kong	0.54	Luxemburg	0.63	Paris	0.45	Sao Paulo	0.64
9	Geneva	0.53	Shanghai	0.60	San Francisco	0.43	Sydney	0.61
10	Singapore	0.53	Boston	0.60	Dubai	0.41	Boston	0.60
11	Milan	0.50	Osaka	0.60	Chicago	0.40	Chicago	0.60
12	Paris	0.50	Zurich	0.59	Boston	0.40	Tokyo	0.60
13	Sydney	0.49	Geneva	0.59	Sydney	0.40	London	0.60
14	Moscow	0.48	Chicago	0.58	Seoul	0.39	Oslo	0.50
15	Brussels	0.48	Paris	0.58	Frankfurt	0.39	Brussels	0.50

According to attached table 10, European respondents generally hold high recognition of financial centers in Europe in terms of financial market, while respondents from North America and Asia post more acceptance of international financial centers in North

America and Asia. Respondents from South America, Oceania and Africa exhibit great disagreement with respondents from the above-mentioned three continents.

Attached table 11 Valuations of growth and development by respondents from various regions

Ranking	Europe		North America		Asia		Other Continents	
	City	Ratio	City	Ratio	City	Ratio	City	Ratio
1	Seoul	0.65	Mumbai	0.70	Shanghai	0.59	Budapest	1.00
2	Singapore	0.60	Shenzhen	0.64	Shenzhen	0.55	Copenhagen	1.00
3	Shenzhen	0.58	Johannesburg	0.64	Beijing	0.54	Shenzhen	1.00
4	Hong Kong	0.58	Beijing	0.63	Singapore	0.50	Vancouver	0.67
5	Shanghai	0.56	Buenos Aires	0.61	Mumbai	0.49	Johannesburg	0.67
6	Johannesburg	0.53	Sao Paulo	0.61	Seoul	0.47	Shanghai	0.62
7	Beijing	0.53	Boston	0.57	Dubai	0.47	Geneva	0.60
8	Moscow	0.53	Seoul	0.57	San Francisco	0.46	Sao Paulo	0.60
9	Osaka	0.52	Zurich	0.57	Taipei	0.44	Zurich	0.55
10	Dubai	0.49	Hong Kong	0.56	Hong Kong	0.44	Brussels	0.50
11	Melbourne	0.46	Vancouver	0.56	Tokyo	0.40	Madrid	0.50
12	Buenos Aires	0.44	Lisbon	0.56	Sao Paulo	0.40	Stockholm	0.50
13	Mumbai	0.44	Toronto	0.55	Amsterdam	0.38	Tokyo	0.50
14	Copenhagen	0.44	Brussels	0.55	Johannesburg	0.38	Dubai	0.50
15	Zurich	0.42	Dubai	0.55	Vancouver	0.37	Beijing	0.50

As shown in attached table 11, European and Asian respondents generally hold high recognition of Asian financial centers in terms of growth and development, while respondents from North America post more acceptance of financial centers in South America. Respondents from other continents exhibit great disagreement with respondents from the above-mentioned three continents.

As shown in attached table 12, European and North American respondents exhibit small difference in financial centers' performance in terms industrial support; while respondents from Asia post more acceptance of financial centers in Asia. Respondents from other continents exhibit great disagreement with respondents from the above-mentioned three continents.

As shown in attached table 13, European respondents have higher recognition of European financial centers in terms of service

standard; while respondents from North America and Asia post more acceptances of financial centers in Asia. Respondents from other continents exhibit great disagreement with respondents from the above-mentioned three continents.

As shown in attached table 14, respondents from various continents post high agreement in the recognition of the general environment of the countries where financial centers are located and they generally accept financial centers in Europe and North America. Therefore, we can see that Europe and North America possess relatively big leading advantages in soft environment construction for the development of international financial centers.

Attached table 12 Valuations of industrial support by respondents from various regions

Ranking	Europe		North America		Asia		Other Continents	
	City	Ratio	City	Ratio	City	Ratio	City	Ratio
1	Mumbai	0.56	Mumbai	0.61	Tokyo	0.44	Helsinki	1.00
2	Seoul	0.54	Geneva	0.60	Shanghai	0.43	Osaka	1.00
3	Osaka	0.52	Shanghai	0.60	Seoul	0.42	Vancouver	0.67
4	Beijing	0.52	Beijing	0.58	Singapore	0.41	Munich	0.64
5	Boston	0.48	Melbourne	0.58	Frankfurt	0.41	Paris	0.54
6	Vancouver	0.45	Amsterdam	0.57	Hong Kong	0.39	Brussels	0.50
7	Washington	0.45	Milan	0.57	Paris	0.39	Moscow	0.50
8	Munich	0.44	Sydney	0.57	London	0.39	Stockholm	0.50
9	Sao Paulo	0.43	Tokyo	0.56	New York	0.38	Toronto	0.50
10	Tokyo	0.43	Washington	0.56	Taipei	0.38	Washington	0.50
11	Geneva	0.41	Dubai	0.55	Munich	0.38	Mumbai	0.50
12	Toronto	0.41	Hong Kong	0.55	Beijing	0.37	Taipei	0.50
13	Frankfurt	0.41	Taipei	0.53	Shenzhen	0.37	Beijing	0.42
14	Zurich	0.40	Luxemburg	0.53	Osaka	0.37	Sao Paulo	0.40
15	Milan	0.40	Singapore	0.52	Mumbai	0.36	Lisbon	0.40

Attached table 13 Valuations of service standards by respondents from various regions

Ranking	Europe		North America		Asia		Other Continents	
	City	Ratio	City	Ratio	City	Ratio	City	Ratio
1	Helsinki	0.51	Osaka	0.70	Tokyo	0.50	Luxemburg	1.00
2	Stockholm	0.47	Dublin	0.63	Hong Kong	0.44	Osaka	1.00
3	Zurich	0.46	Vienna	0.62	Singapore	0.43	Seoul	0.75
4	Taipei	0.45	Singapore	0.60	New York	0.39	Moscow	0.67
5	Vienna	0.45	Hong Kong	0.60	Paris	0.36	Vancouver	0.67
6	Oslo	0.44	Zurich	0.55	London	0.36	Melbourne	0.61
7	Paris	0.43	Vancouver	0.54	Milan	0.35	Geneva	0.60
8	Munich	0.43	Budapest	0.53	Sydney	0.34	Rome	0.57
9	Boston	0.41	Helsinki	0.53	Taipei	0.34	Oslo	0.50
10	Madrid	0.39	Tokyo	0.51	Washington	0.33	Brussels	0.50
11	Frankfurt	0.39	Frankfurt	0.50	Stockholm	0.32	Toronto	0.50
12	New York	0.38	Madrid	0.50	Vancouver	0.32	Chicago	0.50
13	London	0.38	Boston	0.50	Geneva	0.32	Taipei	0.50
14	Chicago	0.38	San Francisco	0.50	Osaka	0.32	Sydney	0.46
15	Geneva	0.38	Toronto	0.49	Zurich	0.31	Zurich	0.45

Attached table 14 Valuations of the country's general environment by respondents from various regions

Ranking	Europe		North America		Asia		Other Continents	
	City	Ratio	City	Ratio	City	Ratio	City	Ratio
1	Zurich	0.54	Melbourne	0.61	Geneva	0.40	Milan	0.75
2	Oslo	0.53	Washington	0.60	Hong Kong	0.40	Vienna	0.60
3	Copenhagen	0.47	Sydney	0.59	New York	0.39	Dublin	0.60
4	Shenzhen	0.47	Copenhagen	0.58	Singapore	0.38	Montreal	0.60
5	Washington	0.46	Budapest	0.58	London	0.36	Brussels	0.50
6	Vancouver	0.45	Luxemburg	0.58	Copenhagen	0.34	San Francisco	0.50
7	Taipei	0.45	Toronto	0.55	Frankfurt	0.34	Mumbai	0.50
8	New York	0.44	Tokyo	0.53	Vienna	0.33	Munich	0.45
9	Geneva	0.44	Taipei	0.52	Tokyo	0.33	Zurich	0.45
10	Toronto	0.43	Buenos Aires	0.50	Oslo	0.33	New York	0.42
11	Brussels	0.42	Seoul	0.50	Paris	0.32	Sydney	0.41
12	Amsterdam	0.42	Frankfurt	0.48	Sydney	0.29	Sao Paulo	0.40
13	London	0.42	Lisbon	0.48	Dubai	0.29	Tokyo	0.40
14	Frankfurt	0.41	Singapore	0.48	Chicago	0.28	Melbourne	0.38
15	Budapest	0.41	Beijing	0.48	Zurich	0.28	Buenos Aires	0.35

Appendix III: Questionnaire

Dear Sir/Madam:

We are doing a research on the competitiveness of international financial center. The following questionnaire is designed in order to get an objective, fair and reasonable result. It will take a few minutes to finish. Please forgive any inconvenience for you. Your reply is of great importance for our project. The information you provide will, of course, be held in the strictest confidence. Sincerely thank your support!

Q1	Which city do you live in usually?	Q1	Which city do you live in usually?	Q1	Which city do you live in usually?
	Amsterdam		Milan		Vancouver
	Vienna		Moscow		Tokyo
	Oslo		Munich		Osaka
	Paris		Geneva		Dubai
	Budapest		Stockholm		Mumbai
	Brussels		Zurich		Singapore
	Dublin		Boston		Beijing
	Frankfurt		Buenos Aires		Shanghai
	Copenhagen		Toronto		Shenzhen
	Helsinki		Chicago		Seoul
	Lisbon		Washington		Taibei
	Luxembourg		San Francisco		Hongkong
	London		Montreal		Johannesburg
	Rome		New York		Melbourne
	Madrid		Sao Paulo		Sydney
					Others

Q2	What is your job title/main area of responsibility?
	President of a company or company partner
	Top-level executives
	Middle Management
	Staff

Q3	Which industry in the following are you working in?
	Investment Banking
	Commercial Banking
	Retail Banking
	Insurance
	Asset Management
	Legal Services
	Accounting Services
	Trade Association
	Regulatory Body/Central Bank
	Government
	Research Institute
	Other - Please Specify

Q4	In which city is the headquarters of your organization located?

	—

	—

Q5	Approximately how many employees does your organization have worldwide?
	Less than 100
	100-500
	500-1000
	1000-2000.....
	2000-5000.....
	More than 5000

Q6	Which of the International Finance Centers in the following do you understand? (Multiple choices allowed)				
	Amsterdam		Milan		Vancouver
	Vienna		Moscow		Tokyo
	Oslo		Munich		Osaka
	Paris		Geneva		Dubai

	Budapest		Stockholm		Mumbai
	Brussels		Zurich		Singapore
	Dublin		Boston		Beijing
	Frankfurt		Buenos Aires		Shanghai
	Copenhagen		Toronto		Shenzhen
	Helsinki		Chicago		Seoul
	Lisbon		Washington		Taipei
	Luxembourg		San Francisco		Hongkong
	London		Montreal		Johannesburg
	Rome		New York		Melbourne
	Madrid		Sao Paulo		Sydney

Q7a	Of the cities you understand, which areas listed below do they perform well in? (Multiple choices allowed)
-----	------------------------------------------------------------------------------------------------------------

	Financial markets	Growth and development	Industry support	Service levels	General environment
Amsterdam	1	2	3	4	5
Vienna	1	2	3	4	5
Oslo	1	2	3	4	5
Paris	1	2	3	4	5
Budapest	1	2	3	4	5
Brussels	1	2	3	4	5
Dublin	1	2	3	4	5
Frankfurt	1	2	3	4	5
Copenhagen	1	2	3	4	5
Helsinki	1	2	3	4	5
Lisbon	1	2	3	4	5
Luxembourg	1	2	3	4	5
London	1	2	3	4	5
Rome	1	2	3	4	5
Madrid	1	2	3	4	5
Milan	1	2	3	4	5

Moscow	1	2	3	4	5
Munich	1	2	3	4	5
Geneva	1	2	3	4	5
Stockholm	1	2	3	4	5
Zurich	1	2	3	4	5
Boston	1	2	3	4	5
Buenos Aires	1	2	3	4	5
Toronto	1	2	3	4	5
Chicago	1	2	3	4	5
Washington	1	2	3	4	5
San Francisco	1	2	3	4	5
Montreal	1	2	3	4	5
New York	1	2	3	4	5
Sao Paulo	1	2	3	4	5
Vancouver	1	2	3	4	5
Tokyo	1	2	3	4	5
Osaka	1	2	3	4	5
Dubai	1	2	3	4	5
Mumbai	1	2	3	4	5
Singapore	1	2	3	4	5
Beijing	1	2	3	4	5
Shanghai	1	2	3	4	5
Shenzhen	1	2	3	4	5
Seoul	1	2	3	4	5
Taibei	1	2	3	4	5
Hongkong	1	2	3	4	5
Johannesburg	1	2	3	4	5
Melbourne	1	2	3	4	5
Sydney	1	2	3	4	5

Q8a	How do the cities you understand perform in terms of insurance services offered?
-----	----------------------------------------------------------------------------------

	Very poorly	Poorly	Average performance	Performs well	Performs very well
Amsterdam	1	2	3	4	5
Vienna	1	2	3	4	5
Oslo	1	2	3	4	5
Paris	1	2	3	4	5
Budapest	1	2	3	4	5
Brussels	1	2	3	4	5
Dublin	1	2	3	4	5
Frankfurt	1	2	3	4	5
Copenhagen	1	2	3	4	5
Helsinki	1	2	3	4	5
Lisbon	1	2	3	4	5
Luxembourg	1	2	3	4	5
London	1	2	3	4	5
Rome	1	2	3	4	5
Madrid	1	2	3	4	5
Milan	1	2	3	4	5
Moscow	1	2	3	4	5
Munich	1	2	3	4	5
Geneva	1	2	3	4	5
Stockholm	1	2	3	4	5
Zurich	1	2	3	4	5
Boston	1	2	3	4	5
Buenos Aires	1	2	3	4	5
Toronto	1	2	3	4	5
Chicago	1	2	3	4	5
Washington	1	2	3	4	5
San Francisco	1	2	3	4	5
Montreal	1	2	3	4	5
New York	1	2	3	4	5

Sao Paulo	1	2	3	4	5
Vancouver	1	2	3	4	5
Tokyo	1	2	3	4	5
Osaka	1	2	3	4	5
Dubai	1	2	3	4	5
Mumbai	1	2	3	4	5
Singapore	1	2	3	4	5
Beijing	1	2	3	4	5
Shanghai	1	2	3	4	5
Shenzhen	1	2	3	4	5
Seoul	1	2	3	4	5
Taibei	1	2	3	4	5
Hongkong	1	2	3	4	5
Johannesburg	1	2	3	4	5
Melbourne	1	2	3	4	5
Sydney	1	2	3	4	5

Q9	Please give your comments on the importance of the five aspects in evaluating the competitiveness of financial centre.
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	Not important at all	Not that important	Average	Important	Very Important	Don't know
Financial markets	1	1	1	1	1	1
Growth and development	2	2	2	2	2	2
Industry support	3	3	3	3	3	3
Service levels	4	4	4	4	4	4
General environment	5	5	5	5	5	5

Q10	Please rate your confidence in the key cities in BRICS countries become International Financial Centers. Please check the appropriate boxes.
-----	----------------------------------------------------------------------------------------------------------------------------------------------

	Have no confidence at all	Not that confident	Neither	Somewhat Confident	Completely confident	Do not know
Shanghai	1	2	3	4	5	9
Sao Paulo	1	2	3	4	5	9
Mumbai	1	2	3	4	5	9
Moscow	1	2	3	4	5	9
Johannesburg	1	2	3	4	5	9

Q11	What is your rating of key cities in the BRICS countries in terms of the following factors? Please rate. 5 represents performs very well, 1 represents very poorly, 1 represents do not know.
-----	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	Shanghai	Sao Paulo	Mumbai	Moscow	Johannesburg
How the five cities fare in terms of their effectiveness in raising capital.	—	—	—	—	—
How the five cities fare in terms of their effectiveness in attracting human resource talent.	—	—	—	—	—
How the five cities fare in terms of the openness of its QDII, QFII, capital markets and projects.	—	—	—	—	—
Degree to which a variety of international and domestic services	—	—	—	—	—
How each city fares in terms of personal wealth management services offered by financial institutions.	—	—	—	—	—
Degree to which the city has shown innovativeness in financial products, financial system, financial services, etc.	—	—	—	—	—
Degree to which capitalization channels and policies, etc. offer convenience to companies.	—	—	—	—	—
Degree to which transacted and settlement systems for various types of financial transactions have been	—	—	—	—	—

developed.					
of financial agency services delivered in the financial center.	—	—	—	—	—
Degree to which the city is prepared to handle civil suits, arbitration and other legal services in cases of financial disputes and case management.	—	—	—	—	—
Degree to which the market is free	—	—	—	—	—
Degree to which policies in areas such as taxation	—	—	—	—	—

Q12a How well do you understand the currencies of the BRICS countries?[SA]

	Don't understand at all	Not that understand	Neither	Somewhat understand	Completely understand
CNY,China	1	1	1	1	1
REAL,Brazil	2	2	2	2	2
INR,India	3	3	3	3	3
RUB,Russia	4	4	4	4	4
ZAR,South Africa	5	5	5	5	5

Q13 Do you have any other comments?

Appendix IV: Objective indicator system

Level-1 Indicator	Level-2 Indicator	Level-3 Indicator	Data Source	Website
Financial Market	Capital Market	Total Value of Share Trading	WFE	http://www.world-exchanges.org
		Total Value of Bond Trading	WFE	http://www.world-exchanges.org
		Total Volume of Commodity futures Trading	WFE	http://www.world-exchanges.org
		Total Volume of Stock Futures Trading	WFE	http://www.world-exchanges.org
		Stock Market's Significance in the National Economy	WFE	http://www.world-exchanges.org
		Internationalization of Securities Markets	WFE	http://www.world-exchanges.org
	Foreign Exchange Market	Foreign Exchange Derivatives Turnover	WFE	http://www.world-exchanges.org
		Foreign Exchange Reserves	pinggu.org	http://www.pinggu.org/bbs
		Exchange Rate Volatility	MasterCard	http://www.mastercardworldwide.com/insights
	Banking Market	Number of Major Bank	The Banker	http://www.thebanker.com
		Major Bank Assets	The Banker	http://www.thebanker.com
		Central Bank Assets To GDP	WFE	http://www.world-exchanges.org
		Bank Assets To GDP	WFE	http://www.world-exchanges.org
	Insurance Market	Insurance Premium	WFE	http://www.world-exchanges.org
		Growth of Insurance Premium	WFE	http://www.world-exchanges.org
		Insurance Services Level	XinHua News Agency Global Survey Network	

Growth and Development	Capital Market Growth	Growth Rate of New Bonds	WFE	http://www.world-exchanges.org
		Growth Rate of Listed Companies	WFE	http://www.world-exchanges.org
		Growth Rate of Share Trading	WFE	http://www.world-exchanges.org
	Economic Growth	Five Year Average Growth Rate of GDP	Global Urban Competitiveness Project	http://www.gucp.org
		Three Year Average Growth Rate of Residential Income	UBS	http://www.ubs.com
		Three Year Average Growth Rate of General Price Index	UBS	http://www.ubs.com
		Growth Rate of Taxes and Social Security	UBS	http://www.ubs.com
	Innovation Outputs	Three Year Average Growth Rate of Domestic Purchasing Power	UBS	http://www.ubs.com
		Added Value of High-tech Products to Added Value of Manufacturing	Centre for International Competitiveness	http://www.cforic.org
		Five Year Average Growth Rate of Government R & D Expenditures	Centre for International Competitiveness	http://www.cforic.org/
		Five Year Average Growth Rate of Government R & D People	Centre for International Competitiveness	http://www.cforic.org
	Innovation Potential	Innovation index	INSEAD	http://www.globalinnovationindex.org/gii/
		Employment in High-Tech Services per 1,000 inhabitants	Centre for International Competitiveness	http://www.cforic.org
		Per Capita Expenditure on R&D performed by Government	Centre for International Competitiveness	http://www.cforic.org

Industrial Support	Business Environment Support	Strength of Manufacturers	Global Urban Competitiveness Project	http://www.gucp.org
		Strength of Traders and Retailers	Global Urban Competitiveness Project	http://www.gucp.org
		Strength of IT Companies	Global Urban Competitiveness Project	http://www.gucp.org
		High-technology exports	World Bank	http://data.worldbank.org/indicator/TX.VAL.TECH.MF.ZS
		Strength of Financial Services Providers	Global Urban Competitiveness Project	http://www.gucp.org
		Number of Multinational headquarters	Global Urban Competitiveness Project	http://www.gucp.org
	Basic Urban Conditions	Geographical Location	Global Urban Competitiveness Project	http://www.gucp.org
		City Population Density	wikipedia	http://en.wikipedia.org/wiki/Population_density
		Cost of Renting Office	UBS	http://www.ubs.com
	Urban Infrastructure	Cargo Throughput	Global Urban Competitiveness Project	http://www.gucp.org
		Airline carriers	Global Urban Competitiveness Project	http://www.gucp.org
		IT Infrastructure	World Economic Forum	http://www.weforum.org

Service Level	Government Service	Services Employment Proportion	Global Urban Competitiveness Project	http://www.gucp.org
		Regulatory quality	World Bank	http://info.worldbank.org/governance/wgi/index.asp
		Digital Governance	Global E-Government Development Report	http://www2.unpan.org/egovkb/global_reports/05report.htm
	Intellectual Capital	Financial Services Employment Percentage	Global Urban Competitiveness Project	http://www.gucp.org
		Per Capita Public Expenditures on Higher Education	Centre for International Competitiveness	http://www.cforic.org
		Population Education Level	Global E-Government Development Report	http://www2.unpan.org/egovkb/global_reports/05report.htm
		Number of Universities	Global Urban Competitiveness Project	http://www.gucp.org
	Urban Living Conditions	Per Capita GDP	World Economic Forum	http://www.weforum.org
		Cost of Living	Global Urban Competitiveness Project	http://www.gucp.org
		Quality of Living Index	Mercer HR	http://www.mercerhr.com
		Unemployment Rate Index	World Economic Forum	http://www.weforum.org
		Crime Statistics	Global Urban Competitiveness Project	http://www.gucp.org

General Environment	Economic Environment	Ease of Doing Business	World Bank	http://www.doingbusiness.org/economyrankings
		Total Foreign Trade Volume	CIA-The world facebook	https://www.cia.gov/library/publications/the-world-factbook/
		Consumer Price Index	IMF	http://www.imf.org
		Economic Freedom Index	Fraser Institute	http://www.freetheworld.com/release.html
		Economic Extrovert Degree	World Economic Forum	http://www.weforum.org
	Political Environment	Happiness Planet Index	NEF	http://neweconomics.org/
		Political Risk Index	Exclusive Analysis Ltd	http://www.exclusive-analysis.com
		Corruption Index	Transparency International	http://www.transparency.org
	Openness	Social Globalization Index	KOF-Index of Globalization	http://globalization.kof.ethz.ch
		Networked Readiness Index	World Economic Forum	http://www.weforum.org
		Global Competitiveness Index	World Economic Forum	http://www.weforum.org
		Foreign Direct Investment	UNCTAD	http://www.unctad.org

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