Xinhua-Dow Jones
International Financial Centers
Development Index
（2013）

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CONTENTS

PREFACE **4**
I. ANALYSIS OF IFCD INDEX RESULTS **6**
(I) COMPREHENSIVE EVALUATION OF DEVELOPMENT OF INTERNATIONAL FINANCIAL CENTERS 6
(II) ANALYSIS OF DEVELOPMENT INDICATORS OF INTERNATIONAL FINANCIAL CENTERS 8
II. ANALYSIS OF GLOBAL FINANCIAL CENTERS BASED ON GEOGRAPHIC DISTRIBUTION **16**
(I) GENERAL ANALYSIS 16
(II) EVALUATIONS OF INTERVIEWEES FROM DIFFERENT REGIONS ON THE DEVELOPMENT INDICATORS OF INTERNATIONAL FINANCIAL CENTERS 20
III. SPECIAL ANALYSIS ON THE DEVELOPMENT OF FINANCIAL CENTERS IN BRICS COUNTRIES **26**
（I）CONFIDENCE ANALYSIS 26
（II）INVESTMENTS ATTRACTION ANALYSIS 26
THIRDLY, THE SCORES SHANGHAI GETS MAINLY ALTERNATE BETWEEN 4 AND 5 PERCENT, WITH THE TOTAL PERCENTAGE 69.78, WHILE THE REST END UP WITH MORE PERCENT SCORES OF 3 AND 4. 27
（III） ANALYSIS OF TALENT ATTRACTION 27
（IV） ANALYSIS OF ABUNDANT DEGREE OF FINANCIAL PRODUCTS 28
（V）ANALYSIS OF DEGREE OF FINANCIAL INNOVATION 28
（VI）ANALYSIS OF DEGREE OF FINANCING FACILITIES 29
（VII） ANALYSIS OF INTERMEDIARY SERVICE LEVEL 29
（VIII）ANALYSIS OF DEGREE OF PERFECTION OF FINANCIAL LEGAL ENVIRONMENT 30
（IX）ANALYSIS OF DEGREE OF CURRENCY INTERNATIONAL RECOGNITION 31
IV. INTRODUCTION TO RESEARCH APPROACH OF IFCD INDEX **32**
(I) GENERAL FRAMEWORK 32
(II)CONSTRUCTION OF OBJECTIVE INDICATOR SYSTEM 33
(III) SUBJECTIVE SURVEY APPROACHES 36
(IV) COMPREHENSIVE ANALYSIS APPROACH OF IFCD INDEX INDICATORS 37
APPENDIX I: FIGURES AND TABLES OF IFCD INDEX 2013 ..... **39**
APPENDIX II: IFCD INDEX SURVEY SYSTEM **47**
(I) ABOUT THE QUESTIONNAIRES 47
(II) BASIC INFORMATION OF QUESTIONNAIRES 47
(III) FURTHER ANALYSIS 49
APPENDIX III: QUESTIONNAIRE **55**
APPENDIX IV: OBJECTIVE INDICATOR SYSTEM **60**

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 Index). A report on the IFCD Index 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 Index 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 Index 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 Index 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 cites.

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 system is responsible for the acquisition of subjective survey results, 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 Index, which was successfully published in 2010 and 2011 and 2012, 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 2013, the research group, consistently upholding the development philosophy of sustainability and tolerance, gradually improving the index system and survey methods to maintain consistency of algorithm. Research and launches the "IFCD Index 2013" to the world.

I. Analysis of IFCD Index Results

(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 accordance with the above principles and sample continuity and stability requirements, the number of sample cities in 2013 is still 45.

Table 1 Sample cities and regional distribution of the IFCD Index 2013

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	

Based on the comprehensive evaluation system of the IFCD Index and after comprehensive analysis and calculation, we obtain the comprehensive scores and ranking results of the development indices of the 45 international financial centers, the ranking results presents the following characteristics :

Firstly ,the international financial centers that rank the top 10 are, from the top down, New York, London ,Hong Kong, Tokyo, Singapore, Shanghai, Paris, Frankfurt, Chicago and Sydney. Compared with the past three years rank, the top 10 cities in all 45 samples in the city ranked the most stable ,especially the top 6 sample cities are New York, London, Hong Kong, Tokyo, Singapore , Shanghai.

Hong Kong for the first time beyond the Tokyo in 2013,into the world's top three, and the four international financial center in the Asia Pacific Region ,Hong Kong, Tokyo, Singapore, Shanghai has formed a regional financial center relatively stable cluster group in the global scope. In addition, Paris beyond Frankfurt, the two cities always in seventh, eighth ranking interval .Compared with last year, Chicago has moved to higher position, Sydney has been back in the top 10 since 2012.

Table 2 Top 10 international financial centers in 2010-2013

Ranking	2013	2012	2011	2010
1	New York	New York	New York	New York
2	London	London	London	London
3	Hong Kong	Tokyo	Tokyo	Tokyo
4	Tokyo	Hong Kong	Hong Kong	Hong Kong
5	Singapore	Singapore	Singapore	Paris
6	Shanghai	Shanghai	Shanghai	Singapore
7	Paris	Frankfurt	Paris	Frankfurt
8	Frankfurt	Paris	Frankfurt	Shanghai
9	Chicago	Zurich	Sydney	Washington
10	Sydney	Chicago	Amsterdam	Sydney

Secondly, compared with 2012,the international financial centers keep relative ,the number of financial centers with big variation or stable is increasing .In 2012,the number of financial centers with stable or relatively stable rankings totals 27,accounting for60percent of the total sample cities ,it is almost equal to last year .As for the number of cities with big variation in rankings ,the year of 2013 has 18,which is much higher than in 2012 and 2011,which was 14 and 5.

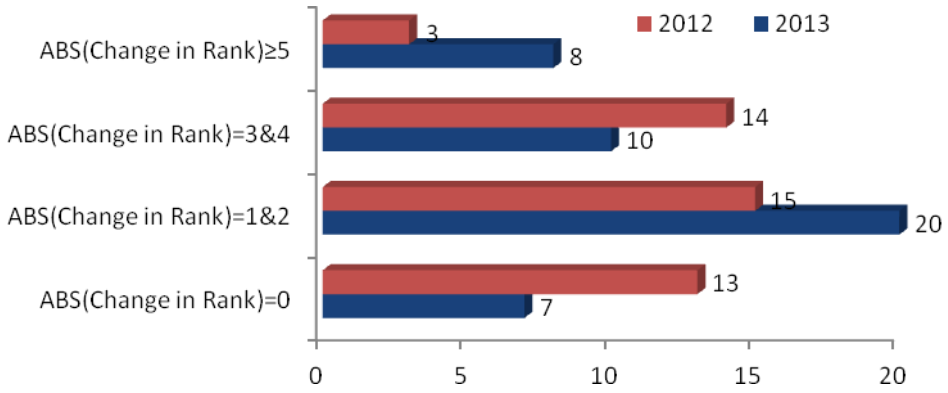


Figure 1 Analysis of Categorization Based on Position Difference of IFCD Index 2013

Thirdly, International financial center position changes obviously regularity ,besides the top 10,the ranking of the whole international financial centers of Europe are decline ,but the international financial centers of Asia and North America are have moved to higher positions ,especially the BRIC countries financial center increase greatly ,this kind of change is also in line with the characteristics of the development of global economic pattern over the past year .The signs of economic recovery in North America was more obvious, while the European debt crisis has not yet bottomed out ,and the traditional European small and medium financial center city showed a downturn trend higher .Such as Milan ,Copenhagen ,Helsinki ,Oslo, Luxembourg ,Dublin ,Rome ,Lisbon, which decline so obvious.

(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 foreign exchange 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 3):

Table 3 Top 10 cities in *financial market*

Ranking	2013	2012	2011	2010
1	New York	New York	New York	London
2	London	London	London	New York
3	Tokyo	Tokyo	Tokyo	Tokyo
4	Hong Kong	Hong Kong	Hong Kong	Hong Kong
5	Singapore	Frankfurt	Paris	Paris
6	Shanghai	Shanghai	Frankfurt	Frankfurt
7	Paris	Singapore	Shanghai	Shanghai
8	Frankfurt	Paris	Singapore	Singapore
9	Chicago	Zurich	Beijing	Zurich
10	Sydney	Chicago	Chicago	Washington

The year of 2013 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 .In addition to Hong Kong and Tokyo ranking is different ,the ranking of the other cities is consistent ,this characteristic has lasted three years ,the perfection of the financial market and the development degree is the first core elements of the financial center development.

Secondly, the financial elements of the market top 10,there are Tokyo, Hong Kong, Singapore, Shanghai, Sydney in the Asia Pacific Financial center in the Asia Pacific region's financial market ,the position of which is becoming stable.

Thirdly ,from the financial market volatility factor ranking ,cities in Europe and emerging economies fluctuations ,Europe Rome, Oslo, Brussels, Milan, Stockholm city ranking sharply ,while the emerging economies of St Paul, Johannesburg, Buenos Aires increase greatly.

Table 4 Cities with bigger change of positions in ranking of *financial market*

City	2013	2012	Change of position	ABS of change
Sao Paulo	22	41	19	19
Johannesburg	26	44	18	18
Rome	41	29	-12	12
Vancouver	23	33	10	10
Oslo	43	35	-8	8
Buenos Aires	35	43	8	8
Brussels	29	21	-8	8
Osaka	24	30	6	6
Milan	32	26	-6	6
Montreal	31	37	6	6
Taipei	36	31	-5	5
Stockholm	33	28	-5	5
Moscow	30	25	-5	5
Vienna	37	32	-5	5
Seoul	27	22	-5	5
Madrid	28	24	-4	4
Mumbai	20	23	3	3
Frankfurt	8	5	-3	3
Shenzhen	17	20	3	3
Boston	16	19	3	3
Geneva	18	15	-3	3
Melbourne	39	36	-3	3
Amsterdam	21	18	-3	3

Table 5 Top 10 cities in *growth and development*

Ranking	2013	2012	2011	2010
1	Shanghai	Shanghai	Shanghai	Shanghai
2	Hong Kong	New York	Hong Kong	Hong Kong
3	London	London	Tokyo	Beijing
4	New York	Hong Kong	New York	New York
5	Singapore	Beijing	Singapore	Tokyo
6	Beijing	Tokyo	Beijing	London
7	Tokyo	Singapore	London	Singapore
8	Shenzhen	Shenzhen	Dubai	Dubai
9	Paris	Paris	Seoul	Paris
10	Dubai	Frankfurt	Shenzhen	Shenzhen

2. *Growth and development*

The growth and development indicator contains three sub-elements, i.e. capital market growth, economic growth, and innovation potential reserves. Synthesizing the evaluation results on the three sub-elements of the 45 international financial centers we get the ranking of their importance in growth and development. The top 10 cities are showed in Table 5:

In 2013 the ranking of growth factor shows the main following characteristics:

On the one hand ,for ranking first in the past four years ,Shanghai is still the most growth financial center in the Asia Pacific region .Hong Kong overtook London, ranked second . The growth rankings of Beijing and Shenzhen are in front, Dubai once again returns to the first 10.

On the other hand ,the largest fluctuations of growth factor ranking cities are Johannesburg, St Paul, Moscow, Dubai and Madrid .The first three are the BRICs countries financial center cities ,the BRIC countries strong strength in terms of growth and development .But in the growing factor, the distribution of the decline cities is balanced ,which includes Dublin, Frankfurt, Rome, Osaka, Seoul, Melbourne ,Taipei, Washington ,the growth of European and American financial center cities significantly backwards.

Table 6 Cities with bigger changes of position in ranking of *growth and development*

City	2013	2012	Change of position	ABS of change
Johannesburg	30	45	15	15
Sao Paulo	27	39	12	12
Moscow	25	16	-9	9
Dubai	10	17	7	7
Madrid	37	30	-7	7
Osaka	44	38	-6	6
Dublin	38	32	-6	6
Frankfurt	15	10	-5	5
Munich	20	25	5	5
Seoul	19	14	-5	5
Melbourne	31	26	-5	5
Taipei	32	27	-5	5
Toronto	16	20	4	4
Washington	23	19	-4	4
Geneva	18	22	4	4
Rome	39	35	-4	4
Sydney	12	15	3	3

3. *Industrial support*

The indicator of industrial support has three sub-elements, including business environment support, intellectual capital, and urban 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 7:

Table 7 Top 10 cities with strongest *industrial support*

Ranking	2013	2012	2011	2010
1	New York	New York	New York	New York
2	London	London	Tokyo	Tokyo
3	Tokyo	Tokyo	London	London
4	Hong Kong	Shanghai	Hong Kong	Hong Kong
5	Shanghai	Hong Kong	Singapore	Singapore
6	Singapore	Singapore	Shanghai	Paris
7	Beijing	Frankfurt	Paris	Shanghai
8	Paris	Beijing	Frankfurt	Frankfurt
9	Chicago	Paris	Beijing	Beijing
10	Frankfurt	Chicago	Chicago	Dubai

The 2013 industrial support index assessments demonstrate the following features:

On the one hand, industry supporting the top 10 financial center sample lasted three years ,which remains unchanged .The ranking of Tokyo, Beijing, Paris, Chicago are rising ,compared with 2012,Shanghai falls one place.

On the other hand ,the fluctuations of industry support ranking have no obvious rules, St Paul, Johannesburg and Taipei rise rapidly .Compared with the corresponding growth factors ,the European financial center city ranked overall is still in a downward trend, including Amsterdam, Copenhagen, Vienna, Oslo, Lisbon ,Industrial base recovery more difficult, on the contrary is, Boston rose rapidly in America Including the Canadian Montreal and Toronto increase scope.

Table 8 Cities with bigger changes of position in ranking of *industrial support*

City	2013	2012	Change of position	ABS of change
Boston	18	29	11	11
Sao Paulo	31	42	11	11
Johannesburg	34	45	11	11
Amsterdam	20	11	-9	9
Copenhagen	38	30	-8	8
Melbourne	30	23	-7	7
Taipei	26	33	7	7
Montreal	32	38	6	6
Toronto	13	18	5	5
Vienna	36	31	-5	5
Milan	29	24	-5	5
Rome	37	32	-5	5
Seoul	19	15	-4	4

Oslo	41	37	-4	4
Lisbon	45	41	-4	4
Frankfurt	10	7	-3	3
Zurich	15	12	-3	3
Shenzhen	14	17	3	3
Helsinki	42	39	-3	3
Dublin	39	36	-3	3

4. *Service level*

The indicator of service has two elements, including social management, working and life. The index assesses all the two elements to evaluate the service standard of the 45 international financial centers and the top 10 cities are displayed in Table 9:

Table 9 Top 10 cities with highest *service level*

Ranking	2013	2012	2011	2010
1	New York	New York	New York	London
2	London	London	London	New York
3	Tokyo	Tokyo	Tokyo	Tokyo
4	Hong Kong	Hong Kong	Hong Kong	Paris
5	Singapore	Paris	Paris	Hong Kong
6	Paris	Singapore	Singapore	Singapore
7	Zurich	Frankfurt	Shanghai	Zurich
8	Sydney	Zurich	Frankfurt	Washington
9	Frankfurt	Chicago	Geneva	Geneva
10	Chicago	Sydney	Zurich	Sydney

The 2013 service index assessments show the following features:

On the one hand ,the service level for covering infrastructure, social management, working and life .These projects are advantage in developed countries where the traditional financial center are .Therefore ,in 2013 the top 10 cities are the cities in developed economies. No emerging economies cities are in the top 10 ranking of service level.

On the other hand, the service level ranking volatility ,Positive fluctuation respectively cities are Beijing, Shenzhen, Taipei, Dubai, Munich, Vancouver, Moscow, St Pau .In addition to Munich ,most of the cities are emerging growth cities, although the city rankings back ,their service level improve very fast .Lay a solid foundation for the world financial center.

Table 10 Cities with bigger change of positions in ranking of *service level*

City	2013	2012	Change of position	ABS of change
Beijing	19	35	16	16
Shenzhen	27	40	13	13
Helsinki	32	21	-11	11
Taipei	26	36	10	10
Rome	39	29	-10	10
Copenhagen	29	20	-9	9
Dublin	40	31	-9	9
Madrid	33	25	-8	8
Dubai	21	27	6	6
Munich	20	26	6	6
Vancouver	18	24	6	6
Stockholm	24	18	-6	6
Lisbon	44	38	-6	6
Geneva	16	11	-5	5
Moscow	37	41	4	4
Sao Paulo	41	45	4	4
Amsterdam	17	13	-4	4
Vienna	23	19	-4	4
San Francisco	11	14	3	3
Toronto	12	15	3	3
Washington	13	16	3	3
Osaka	31	34	3	3
Brussels	25	22	-3	3
Budapest	45	42	-3	3

Table 11 Top 10 cities with most favorable *general environment*

Ranking	2013	2012	2011	2010
1	London	New York	London	London
2	New York	London	New York	New York
3	Hong Kong	Hong Kong	Tokyo	Tokyo
4	Tokyo	Frankfurt	Hong Kong	Hong Kong
5	Singapore	Tokyo	Paris	Paris
6	Paris	Singapore	Singapore	Washington
7	Zurich	Zurich	Amsterdam	Singapore
8	Frankfurt	Paris	Frankfurt	Sydney
9	Toronto	Geneva	Sydney	Zurich
10	Sydney	Amsterdam	Geneva	Frankfurt

5. General environment

The indicator of general environment is composed of forth sub-elements, including the economic environment, political environment, openness, and nature environment. The index assesses all these four elements to evaluate the general environment of the 45 international financial centers and the top 10 cities are displayed in Table 11:

The 2013 general environment index assessments demonstrate the following features:

On the one hand, general environmental ranking is similar with the ranking of service level ,the financial center of the traditional developed countries' outstanding political, economic, natural environment are important support for the development of the financial markets .Including legal, open ,and the market are extremely important .In 2013,the top 10 cities are as the same as those in the last three years ,it is relatively stable.

On the other hand , the general environment ranking of the countries which have a big fluctuation are most concentrated in Europe ,Copenhagen, Vienna, Oslo, Amsterdam, Luxemburg . The cities of America such as Boston, San Francisco, Vancouver, and Washington are rising sharply ,In the Asia Pacific region, Taipei, Shenzhen Shanghai to rise slightly.

Table 12 Cities with bigger changes of position in ranking of *general environment*

City	2013	2012	Change of position	ABS of change
Boston	18	28	10	10
Copenhagen	25	15	-10	10
Vienna	23	14	-9	9
Oslo	27	18	-9	9
San Francisco	11	19	8	8
Moscow	35	43	8	8
Luxembourg	37	29	-8	8
Vancouver	17	23	6	6
Amsterdam	16	10	-6	6
Washington	15	20	5	5
Shenzhen	31	36	5	5
Melbourne	21	26	5	5
Geneva	14	9	-5	5
Frankfurt	8	4	-4	4
Johannesburg	41	45	4	4
Helsinki	28	24	-4	4
Budapest	44	40	-4	4
Taipei	29	33	4	4
Dublin	34	31	-3	3
Buenos Aires	45	42	-3	3
Shanghai	13	16	3	3

II. Analysis of Global Financial Centers based on Geographic Distribution

The geographic distribution of the IFCD Index 2013's 45 financial centers around the world is showed in Table 13. 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. Judging from the 2013 ranking, there are 5 Asia-Pacific region and Africa cities have rushed into the top 10, which means their collective strength is stabilizing and rising.

Table 13 Global distribution of cities under assessment

Region	Cities involved	Top 10 cities in 2013	Top 10 cities in 2012	Top 10 cities in 2011
America	10	New York(1) Chicago(9)	New York(1) Chicago(10)	New York(1)
Europe	21	London(2) Paris(7) Frankfurt(8)	London(2) Frankfurt(7) Paris(8) Zurich(9)	London(2) Paris(7) Frankfurt(8) Amsterdam(10)
Asia Pacific and Africa	14	Hong Kong(3) Tokyo(4) Singapore(5) Shanghai(6) Sydney(10)	Tokyo(3) Hong Kong(4) Singapore(5) Shanghai(6)	Tokyo(3) Hong Kong(4) Singapore(5) Shanghai(6) Sydney(9)

(I) General analysis

1. Financial centers in each continent

Group of the financial centers in America is the steadiest one in our list and the base of its stability comes from the support of the world's top economies which leaded by the United States. From 2012, through stimulus package and fiscal cliff aversion, US is already on the route to recovery. Especially, a rapid process of re-industrialization provides an important basis for financial centers' development. In 2013, America's top 5 financial centers are New York, Chicago, San Francisco, Toronto and Washington.

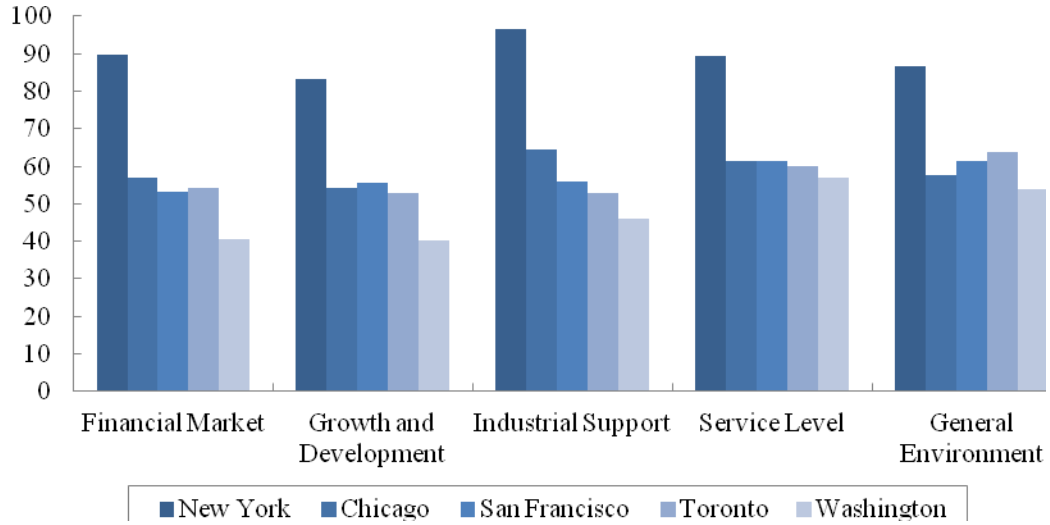


Figure 2 Indicator Scores Comparisons of the Top Five American Cities

With the title of traditional and old developed, Europe's financial hubs are the origin for the other centers. However, as the European Debt Crisis continue to ferment, several countries even on the edge of bankruptcy, European economy and the euro are continue to slump. We see Policies and measures to relieve this slump are often invalid due to the loose Relationship between European countries. Even Germany economy have released several positive signals, other economies related to it are still in recession, which might drag down the Germany economy. In 2013, Europe's top 5 financial centers are London, Paris, Frankfurt, Zurich and Geneva.

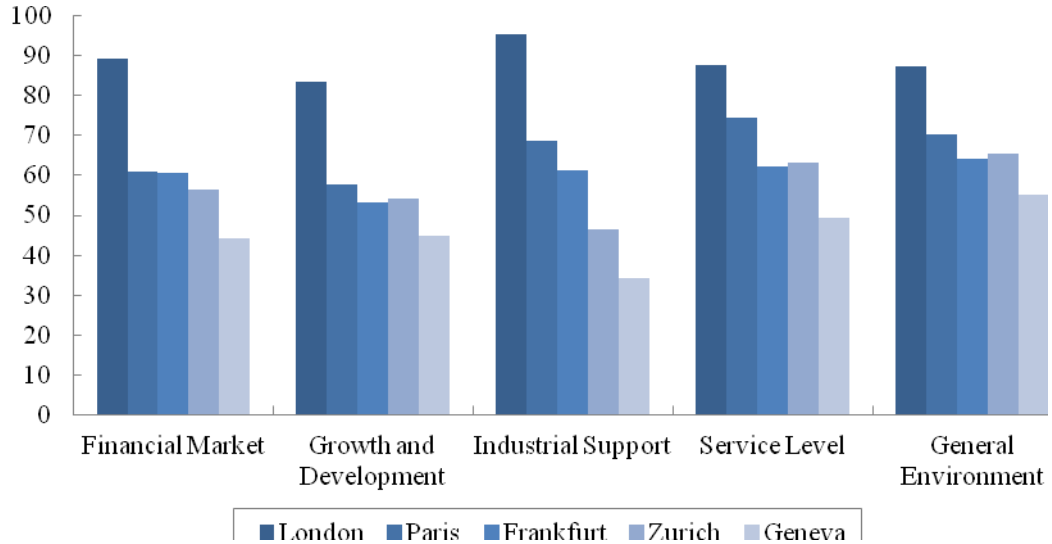


Figure 3 Indicator Scores Comparisons of the Top Five European Cities

Financial centers in Asia-Pacific region and Africa is a good team in the development of the world's financial structure. Economies in these regions are highly complementary, with underlying growth potential and wide markets. All the basic elements have

supported the rapid expansion of the cities. Especially, the reformation and industries' upgrade led by China has brought a huge progress for the region. In 2013, the top 5 financial centers in Asia-Pacific region and Africa are Hong Kong, Tokyo, Singapore, Shanghai and Sydney.

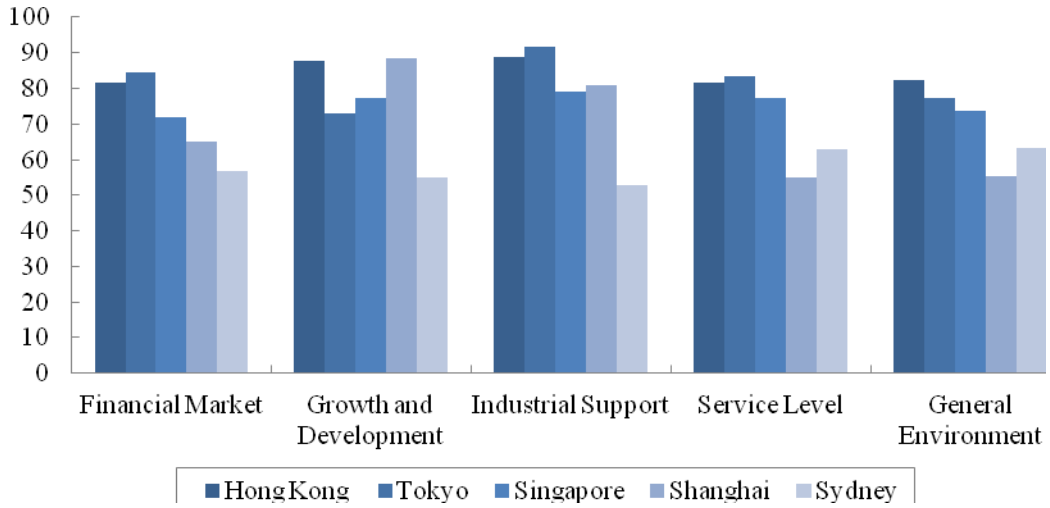


Figure 4 Indicator Scores Comparisons of the Top Five Asian Cities

2. Continents' rankings in each indicator

From the competitions in each indicator, financial centers in each continent are mainly present the following characteristics:

Firstly, with a stable ranking in America and Europe and a larger change in Asia-Pacific region and Africa, the distribution of the centers is balanced in all.

Secondly, from the elements of financial market and development and growth, in 2013, financial centers in Asia-Pacific region and Africa have outstanding performance which makes more of them entry the top 10. Particularly on development and growth, 7 cities in the top 10 are from these regions.

Thirdly, on service level and general environment, Financial centers in Asia-Pacific region and Africa remained close to their rivals in America and Europe, especially for Tokyo, Hong Kong and Singapore, which are very stable in the list. However, cities like Shanghai, Shenzhen, Dubai and Sidney that score higher on development and growth are relatively weak on the two elements.

Table 14 Global distribution of top 10 cities in financial market

Region	2013	2012	2011
America	New York(1) Chicago(9)	New York(1) Chicago(10)	New York(1) Chicago(10)
Europe	London(2) Paris(7) Frankfurt(8)	London(2) Frankfurt(5) Paris(8) Zurich(9)	London(2) Paris(5) Frankfurt(6)
Asia Pacific	Hong Kong(3) Tokyo(4) Singapore(5) Shanghai(6) Sydney(10)	Tokyo(3) Hong Kong(4) Shanghai(6) Singapore(7)	Tokyo(3) Hong Kong(4) Shanghai(7) Singapore(8) Beijing(9)

Table 15 Global distribution of Top 10 cities on growth and development

Region	2013	2012	2011
America	New York(4)	New York(2)	New York(4)
Europe	London(3) Paris(9)	London(3) Paris(9) Frankfurt(10)	London(7)
Asia Pacific	Shanghai(1) Hong Kong(2) Singapore(5) Beijing (6) Tokyo(7) Shenzhen(8) Dubai(10)	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 16 Global distribution of Top 10 cities on industrial support

Region	2013	2012	2011
America	New York(1) Chicago(9)	New York(1) Chicago(10)	New York(1) Chicago(10)
Europe	London(2) Paris(8) Frankfurt(10)	London(2) Frankfurt(7) Paris(9)	London(3) Paris(7) Frankfurt(8)
Asia Pacific	Tokyo(3) Hong Kong(4) Shanghai(5) Singapore(6) Beijing(7)	Tokyo(3) Shanghai(4) Hong Kong(5) Singapore(6) Beijing(8)	Tokyo(2) Hong Kong(4) Singapore(5) Shanghai(6) Beijing(9)

Table 17 Global distribution of Top 10 cities on service level

Region	2013	2012	2011
America	New York(1) Chicago(10)	New York(1) Chicago(9)	New York(1)
Europe	London(2) Paris(6) Zurich(7) Frankfurt(9)	London(2) Paris(5) Frankfurt(7) Zurich(8)	London(2) Paris(5) Frankfurt(8) Geneva(9) Zurich(10)
Asia Pacific	Tokyo(3) Hong Kong(4) Singapore(5) Sydney(8)	Tokyo(3) Hong Kong(4) Singapore(6) Sydney(10)	Tokyo(3) Hong Kong(4) Singapore(6) Shanghai(7)

Table 18 Global distribution of Top 10 cities on general environment

Region	2013	2012	2011
America	New York(2) Toronto（10）	New York(1)	New York(2)
Europe	London(1) Paris(6) Zurich(7) Frankfurt(8)	London(2) Frankfurt(4) Paris(8) Zurich(7) Geneva(9) Amsterdam (10)	London(1) Paris(5) Amsterdam (7) Frankfurt(8) Geneva(10)
Asia Pacific	Hong Kong(3) Tokyo(4) Singapore(5) Sydney(10)	Hong Kong(3) Tokyo(5) Singapore(6)	Tokyo(3) Hong Kong(4) Singapore(6) Sydney(9)

(II) Evaluations of interviewees from different regions on the development indicators of international financial centers

A major innovation in IFCD Index 2013 is by using information system in Xinhua news agency, we made a subjective survey facing global financial and related professionals. The survey mainly serves the comprehensive ranking; meanwhile, by digging deeper the data we could obtain some more objective evaluations pointed to different development indicators.

In 2013, the Xinhua news agency global information collection system has obtained 4856 valid questionnaires. The sample distribution is balanced as a whole, including 1217 from America, 1809 from Europe and 1830 from Asia-Pacific region and Africa.

Table 19 Continents of questionnaires' respondents

Region	Sample amount	Proportion (%)
America	1217	25.06
Europe	1809	37.25
Asia Pacific and Africa	1830	37.69
Total	4856	100.00

1. Evaluations from interviewees in different regions on the indicator of financial market

Apart from New York, London, Hong Kong and Singapore, European respondents don't think there are more commendable developed financial markets in Asia-Pacific region. To the contrary, American respondents consider cities like Shanghai, Beijing, St Paul and Buenos Aires also own financial markets which can list on the top 20. Interviewees from Asia-Pacific region and Africa relatively approve noted cities like New York, London, Hong Kong, Paris and Tokyo. Beyond that, they tend to give high scores to boom cities like Taipei and Bombay.

Table 20 Valuations of financial markets by respondents from various regions

Ranking	America		Europe		Asia Pacific and Africa	
	City	Ratio	City	Ratio	City	Ratio
1	New York	38.70	London	27.58	New York	34.32
2	Toronto	18.90	New York	22.22	Hong Kong	29.89
3	London	17.17	Frankfurt	14.21	London	27.54
4	Chicago	13.72	Paris	9.95	Tokyo	21.20
5	San Francisco	11.50	Zurich	9.67	Singapore	20.98
6	Tokyo	11.09	Tokyo	8.40	Shanghai	17.60
7	Boston	9.86	Hong Kong	6.91	Sydney	13.22
8	Washington	9.29	Brussels	6.25	Beijing	11.31
9	Hong Kong	9.20	Geneva	5.58	Washington	8.85
10	Vancouver	7.97	Milan	5.25	Dubai	8.69
11	Montreal	6.82	Amsterdam	5.14	Melbourne	8.42
12	Paris	6.33	Madrid	4.20	Paris	8.36
13	Sao Paulo	5.42	Singapore	4.20	Taipei	7.05
14	Shanghai	4.93	Stockholm	4.15	Chicago	6.89
15	Zurich	4.85	Luxembourg	3.92	Seoul	6.78
16	Beijing	4.77	Munich	3.81	Mumbai	6.72
17	Singapore	4.35	Rome	3.54	San Francisco	6.17
18	Frankfurt	4.11	Moscow	3.54	Frankfurt	6.07
19	Geneva	3.86	Vienna	3.21	Shenzhen	6.01
20	Buenos Aires	3.53	Washington	3.21	Zurich	5.79

Note: 1、The city in cell is European city, in cell is American city, in cell is the Asia Pacific or African city. Tables from 21 to 24 are showed in the same way; 2、The "Proportion" in the table is the ratio of the number of respondents who believe the city is outstanding to the total number of respondents in each continent. The proportions in the table from 21 to 24 are calculated in the same way.

2. Evaluations from interviewees in different regions on the growth and development indicator

Interviewees from the three regions have mutually given high scores to financial centers in Asia-Pacific region on the growth and development indicator. Even the normally stodgy European interviewees have list Beijing, Shanghai and Dubai into the top 20 cities measured by the growth and development indicator.

It's worth noting that Asia-Pacific region and Africa Interviewees have still list New York and London into the top 5, which means their irreplaceability in the global financial development structure.

Table 21 Valuations of growth and development by respondents from various regions

Ranking	America		Europe		Asia Pacific and Africa	
	City	Ratio	City	Ratio	City	Ratio
1	New York	34.35	London	17.74	Shanghai	28.47
2	Toronto	15.20	New York	14.65	Hong Kong	23.50
3	London	13.31	Frankfurt	9.51	New York	20.98
4	Chicago	12.00	Hong Kong	8.02	Singapore	19.62
5	San Francisco	10.93	Paris	7.08	London	16.12
6	Hong Kong	9.53	Zurich	6.91	Beijing	15.85
7	Boston	9.45	Tokyo	6.63	Tokyo	15.19
8	Tokyo	9.29	Singapore	4.64	Shenzhen	11.15
9	Washington	8.87	Brussels	4.48	Sydney	11.15
10	Vancouver	7.40	Amsterdam	4.26	Dubai	10.87
11	Beijing	6.33	Geneva	3.81	Mumbai	8.74
12	Montreal	6.00	Munich	3.54	Seoul	8.14
13	Sao Paulo	5.75	Moscow	3.48	Melbourne	8.14
14	Shanghai	5.51	Stockholm	3.32	Taipei	7.81
15	Paris	5.09	Beijing	3.26	Washington	6.67
16	Zurich	4.27	Milan	3.21	Paris	6.45
17	Singapore	3.94	Shanghai	3.10	San Francisco	6.17
18	Buenos Aires	3.78	Vienna	2.93	Chicago	5.96
19	Dubai	3.78	Dublin	2.87	Zurich	4.97
20	Frankfurt	2.71	Dubai	2.87	Osaka	4.70

Note: 1、The city in cell is European city, in cell is American city, in cell is the Asia Pacific or African city. Tables from 21 to 24 are showed in the same way; 2、The "Proportion" in the table is the ratio of the number of respondents who believe the city is outstanding to the total number of respondents in each continent. The proportions in the table from 21 to 24 are calculated in the same way.

*3. **Evaluations from interviewees in different regions on the industrial support indicator***

Situation on the indicator of industrial support is similar to that on the growth and development. American and European interviewees admit financial centers in Asia-Pacific region such as Tokyo, Hong

Kong, Singapore, Beijing, Shanghai and Dubai enjoy high level of industrial support. European Interviewees regard only New York and Washington have good industrial support. By comparison, American interviewees have listed London, Paris, Frankfurt and Zurich.

Table 22 Valuations of industrial support by respondents from various regions

Ranking	America		Europe		Asia Pacific and Africa	
	City	Ratio	City	Ratio	City	Ratio
1	New York	33.85	London	17.74	New York	25.79
2	Chicago	15.53	New York	13.93	Hong Kong	22.30
3	Toronto	15.12	Frankfurt	10.61	Tokyo	20.82
4	London	13.80	Zurich	7.24	London	19.56
5	San Francisco	11.34	Tokyo	7.24	Shanghai	18.85
6	Boston	10.60	Paris	6.74	Singapore	17.05
7	Tokyo	10.19	Hong Kong	5.69	Beijing	12.84
8	Washington	10.02	Amsterdam	4.81	Sydney	10.55
9	Vancouver	7.72	Milan	4.48	Taipei	8.20
10	Hong Kong	7.72	Munich	4.31	Melbourne	8.03
11	Montreal	6.00	Brussels	4.26	Paris	7.92
12	Paris	5.67	Madrid	3.70	Washington	7.81
13	Beijing	5.09	Geneva	3.70	Seoul	7.81
14	Sao Paulo	4.68	Stockholm	3.37	Dubai	7.65
15	Shanghai	4.27	Vienna	3.21	Shenzhen	7.32
16	Singapore	4.11	Singapore	3.15	Mumbai	7.21
17	Frankfurt	3.29	Beijing	2.93	Chicago	6.94
18	Zurich	3.29	Dublin	2.87	Frankfurt	6.56
19	Dubai	3.29	Moscow	2.60	Osaka	5.74
20	Rome	2.96	Washington	2.54	San Francisco	5.08

Note: 1、The city in cell is European city, in cell is American city, in cell is the Asia Pacific or African city. Tables from 21 to 24 are showed in the same way; 2、The "Proportion" in the table is the ratio of the number of respondents who believe the city is outstanding to the total number of respondents in each continent. The proportions in the table from 21 to 24 are calculated in the same way.

4. ***Evaluations from interviewees in different regions on the indicator of service***

American and European interviewees think the service level in Asia-Pacific region is not high. Compared with scores obtained on indicators of financial market, growth and development and industrial support, services level in Tokyo and Hong Kong are regarded to be relatively low. According to European interviewees, Shanghai has not been selected into the top 20 Judged by services level. As the capital of China, Beijing is picked by American interviewees into the top 20 due to its given advantages in aspect of service level.

Table 23 Valuations of service standards by respondents from various regions

Ranking	America		Europe		Asia Pacific and Africa	
	City	Ratio	City	Ratio	City	Ratio
1	New York	30.57	London	19.68	New York	26.72
2	Toronto	16.43	New York	12.88	Hong Kong	26.12
3	London	14.13	Paris	11.00	Tokyo	24.04
4	Chicago	13.31	Frankfurt	10.72	London	22.46
5	San Francisco	12.74	Zurich	8.18	Singapore	20.33
6	Boston	11.75	Madrid	5.36	Shanghai	13.01
7	Washington	11.67	Brussels	5.25	Sydney	12.57
8	Vancouver	10.19	Amsterdam	5.14	Paris	9.45
9	Tokyo	9.12	Tokyo	5.03	Melbourne	9.34
10	Montreal	8.22	Munich	4.59	Washington	8.96
11	Paris	6.82	Geneva	4.37	Beijing	8.85
12	Hong Kong	6.74	Stockholm	4.31	Dubai	8.47
13	Buenos Aires	4.27	Vienna	3.98	Taipei	7.76
14	Zurich	4.03	Hong Kong	3.76	Chicago	6.17
15	Frankfurt	3.94	Milan	3.32	Seoul	5.68
16	Beijing	3.78	Rome	3.15	Zurich	5.41
17	Sao Paulo	3.70	Dublin	3.10	San Francisco	5.30
18	Singapore	3.53	Luxembourg	2.82	Osaka	5.25
19	Sydney	3.12	Washington	2.65	Mumbai	4.97
20	Geneva	3.04	Sydney	2.60	Frankfurt	4.92

Note: 1、The city in cell is European city, in cell is American city, in cell is the Asia Pacific or African city. Tables from 21 to 24 are showed in the same way; 2、The "Proportion" in the table is the ratio of the number of respondents who believe the city is outstanding to the total number of respondents in each continent. The proportions in the table from 21 to 24 are calculated in the same way.

5. Evaluations from interviewees in different regions on the indicator of general environment

Ranking on general environment is similar to that on service in which American and European interviewees haven't given a better evaluation to the cities in Asia-Pacific region.

Cities that come out looking good are those capitals like Beijing, Tokyo and Sydney. As China's unique economic Freeport, Hong Kong is always in the top 20 according to its perfect infrastructure and environment.

Table 24 Valuations of the country's general environment by respondents from various regions

Ranking	America		Europe		Asia Pacific and Africa	
	City	Ratio	City	Ratio	City	Ratio
1	New York	30.32	London	19.90	New York	29.02
2	Toronto	16.35	New York	15.53	Hong Kong	24.48
3	London	14.13	Frankfurt	9.95	London	20.55
4	San Francisco	12.65	Paris	8.62	Singapore	16.61
5	Washington	12.08	Zurich	8.51	Tokyo	15.14
6	Chicago	10.85	Brussels	5.97	Sydney	11.86
7	Vancouver	9.29	Amsterdam	5.36	Shanghai	10.55
8	Boston	9.20	Tokyo	4.92	Paris	8.69
9	Tokyo	8.71	Geneva	4.48	Melbourne	8.42
10	Paris	6.33	Madrid	4.31	Washington	8.09
11	Montreal	5.67	Stockholm	4.09	Beijing	7.16
12	Hong Kong	4.60	Vienna	3.92	Taipei	6.78
13	Buenos Aires	3.86	Hong Kong	3.92	Dubai	6.61
14	Sao Paulo	3.86	Munich	3.48	Chicago	5.85
15	Zurich	3.62	Washington	3.04	San Francisco	5.68
16	Frankfurt	3.37	Copenhagen	2.99	Shenzhen	5.25
17	Geneva	3.37	Luxembourg	2.87	Seoul	5.14
18	Sydney	3.29	Milan	2.82	Frankfurt	5.08
19	Beijing	3.12	Sydney	2.82	Zurich	5.03
20	Amsterdam	2.96	Dublin	2.71	Geneva	4.70

Note: 1、The city in cell is European city, in cell is American city, in cell is the Asia Pacific or African city. Tables from 21 to 24 are showed in the same way; 2、The "Proportion" in the table is the ratio of the number of respondents who believe the city is outstanding to the total number of respondents in each continent. The proportions in the table from 21 to 24 are calculated in the same way.

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

In the year of 2013, our research group continues to regard Shanghai, Johannesburg, Sao Paulo, Moscow and Mumbai as representative cities of BRICS countries' financial centers, and we take these five cities as sample to conduct special investigation into developing confidence and development conditions of elements related to finance of BRICS countries' financial centers.

（I）Confidence analysis

Confidence analysis mainly investigates interviewees' confidence for the most representative cities in the BRIC countries becoming international financial centers. Scores of 5 expressed fully confident; 4 expressed somewhat confident; 3 represent neither; 2 represents not that confident; 1 represents have no confidence at all.

Table 25 Comparisons of Confidence Index of the Financial Centers in BRICS countries

City	Score 1	Score 2	Score 3	Score 4	Score 5	Comprehensive scores	Ranking 2013	Ranking 2012
Shanghai	3.11%	8.26%	18.45%	45.90%	24.28%	3.80	1	1
Johannesburg	7.36%	20.87%	35.88%	27.25%	8.64%	3.09	2	5
Sao Paulo	6.26%	22.16%	36.55%	27.25%	7.78%	3.08	3	2
Moscow	9.72%	22.30%	32.02%	27.39%	8.58%	3.03	4	4
Mumbai	11.32%	22.86%	29.04%	26.96%	9.82%	3.01	5	3

Note: The percentage in the second column refers to the ratio of the number of respondents, who believe the confidence score of the city is 1, to the total number of respondents who are familiar with the city. The percentages in the second column to the sixth column are calculated in the same way. If sum of the percentages are not equal to 100%, it is because of round-off error. Comprehensive scores are weighted average. The weight is the percentage. The Comprehensive scores and percentages in the table from 26 to 32 are calculated in the same way.

Based on table 25, we can conclude that the confidence scores received by the respondents for the BRICS countries have the following features:

First and foremost, Shanghai still stands out this year, ranking first and followed by Johannesburg, Sao Paulo, Moscow and Mumbai. Compared with 2012, Johannesburg is raising faster, while Sao Paulo and Mumbai have drops in both.

Secondly, there is a large confidence gap between Shanghai and the other four cities. With the second place, Johannesburg lagging behind by 0.71, 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 70.18, while the rest end up with more percent scores of 2 and 4.

（II）Investments attraction analysis

Investments attraction will compare the capital attracting powers between the 5 cities. 5 represents very good and 1 represents very bad.

Table 26 Capital attraction index comparison of the BRICS countries

City	Score 1	Score 2	Score 3	Score 4	Score 5	Comprehensive scores	Ranking 2013	Ranking 2012
Shanghai	1.41%	5.66%	23.15%	47.71%	22.07%	3.83	1	1
Moscow	3.43%	14.92%	36.82%	33.28%	11.55%	3.35	2	2
Johannesburg	3.59%	14.72%	42.38%	30.20%	9.10%	3.26	3	3
Sao Paulo	2.69%	16.02%	44.04%	27.89%	9.36%	3.25	4	4
Mumbai	4.97%	17.73%	36.49%	30.77%	10.05%	3.23	5	5

From table 26, we can see that financial centers in BRICS countries attract investments in following pattern:

Firstly, 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 leads the rankings with Moscow, Mumbai, Sao Paulo and Johannesburg lagging behind.

Thirdly, the scores Shanghai gets mainly alternate between 4 and 5 percent, with the total percentage 69.78, while the rest end up with more percent scores of 3 and 4.

（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. 5 represents very good and 1 represents very bad.

Table 27 Comparisons of the talents elements attraction capacity of the financial centers in BRICS countries

City	Score 1	Score 2	Score 3	Score 4	Score 5	Comprehensive scores	Ranking 2013	Ranking 2012
Shanghai	1.92%	7.24%	26.83%	44.14%	19.86%	3.73	1	1
Mumbai	5.14%	18.82%	34.18%	31.18%	10.68%	3.23	2	5
Johannesburg	4.23%	17.97%	38.78%	30.43%	8.58%	3.21	3	3
Moscow	4.57%	17.67%	39.91%	28.64%	9.21%	3.20	4	4
Sao Paulo	3.16%	18.07%	42.40%	28.13%	8.25%	3.20	5	2

Note: The comprehensive score of Moscow and Sao Paulo are 3.2024 and 3.2023.

From table 27, we can see that: Firstly, Shanghai is on the whole more attractive to talent than other cities, taking first place among the five, with the ensuing cities, Mumbai, Johannesburg, Moscow and Sao Paulo. Compared with 2012, Mumbai has raised 3 places while Sao Paulo dropped 3 places.

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

（IV） Analysis of abundant degree of financial products

Abundant degree of financial products focuses mainly on the comparisons of the richness and diversification of financial products such as bonds, stocks, futures, commodities, foreign exchange, funds in each city. 5 represents very good and 1 represents very bad.

Table 28 Comparisons of abundant degree of the financial markets in BRICS financial centers

City	Score 1	Score 2	Score 3	Score 4	Score 5	Comprehensive scores	Ranking 2013
Shanghai	1.75%	8.26%	32.94%	41.14%	15.90%	3.61	1
Johannesburg	3.59%	14.32%	45.16%	29.10%	7.83%	3.23	2
Sao Paulo	2.34%	18.01%	44.97%	27.78%	6.90%	3.19	3
Moscow	3.66%	18.01%	42.14%	29.16%	7.03%	3.18	4
Mumbai	4.45%	19.11%	40.53%	28.58%	7.33%	3.15	5

From table 28, we can conclude that the richness of financial products in the BRICS countries have the following features:

Firstly, 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, Mumbai, Moscow and Sao Paulo.

（V）Analysis of degree of financial innovation

The degree of financial innovation focuses mainly on the comparison of the financial products creativity, financial system creativity, and financial service innovation in each city. 5 represents very good and 1 represents very bad.

Table 29 Comparisons of the degree of financial innovation of the financial centers in BRICS countries

City	Score 1	Score 2	Score 3	Score 4	Score 5	Comprehensive scores	Ranking 2013	Ranking 2012
Shanghai	2.04%	9.05%	32.03%	41.94%	14.94%	3.59	1	1
Johannesburg	3.30%	17.62%	44.00%	27.94%	7.13%	3.18	2	3
Sao Paulo	2.75%	20.29%	45.38%	24.62%	6.96%	3.13	3	2
Mumbai	5.20%	20.44%	40.01%	27.25%	7.10%	3.11	4	5
Moscow	4.69%	21.50%	41.11%	25.96%	6.75%	3.09	5	4

From the table 29, we can see that: firstly, Shanghai has on the whole higher scores than other cities, ranking first among the five, followed by Johannesburg, Sao Paulo, Mumbai and Moscow.

Secondly, as far as the respondents' grading in terms of the five-score confidence level is concerned, Shanghai takes the lead with Johannesburg, Mumbai, Sao Paulo and Moscow 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. 5 represents very good and 1 represents very bad.

Table 30 Comparisons of degree of facilities of financial centers in BRICS countries

City	Score 1	Score 2	Score 3	Score 4	Score 5	Comprehensive scores	Ranking 2013	Ranking 2012
Shanghai	1.98%	10.07%	34.86%	38.88%	14.20%	3.53	1	1
Johannesburg	3.88%	15.77%	45.10%	28.17%	7.07%	3.19	2	2
Sao Paulo	3.27%	18.36%	46.43%	25.26%	6.67%	3.14	3	3
Moscow	5.20%	19.04%	42.54%	26.36%	6.86%	3.11	4	4
Mumbai	5.31%	20.84%	41.74%	24.77%	7.33%	3.08	5	5

From table 30, we can see that: firstly, Shanghai scores on the whole higher than other cities, ranking first among the five, followed by Johannesburg, Sao Paulo, Moscow, and Mumbai.

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

（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. 5 represents very good and 1 represents very bad.

Table 31 Comparisons of Intermediary Service Level of financial centers in BRICS countries

City	Score 1	Score 2	Score 3	Score 4	Score 5	Comprehensive scores	Ranking 2013	Ranking 2012
Shanghai	2.21%	10.41%	36.05%	38.37%	12.96%	3.49	1	1
Johannesburg	3.65%	17.39%	44.93%	27.88%	6.14%	3.15	2	2
Sao Paulo	3.10%	19.59%	47.19%	23.45%	6.67%	3.11	3	3
Moscow	4.63%	19.04%	44.83%	24.99%	6.52%	3.10	4	4
Mumbai	5.48%	22.00%	40.47%	24.54%	7.51%	3.07	5	5

From table 31, we can see that: firstly, 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 Mumbai, Sao Paulo, Moscow and Johannesburg.

（VIII）Analysis of degree of perfection of financial legal environment

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. 5 represents very good and 1 represents very bad.

Table 32 Comparison of the degree of perfection of the financial legal environment of the financial centers in BRICS countries

City	Score 1	Score 2	Score 3	Score 4	Score 5	Comprehensive scores	Ranking 2013	Ranking 2012
Shanghai	5.66%	17.60%	35.09%	30.84%	10.81%	3.24	1	1
Johannesburg	5.86%	20.12%	41.62%	26.32%	6.09%	3.07	2	2
Sao Paulo	5.03%	24.15%	41.58%	23.04%	6.20%	3.01	3	3
Moscow	9.89%	24.59%	37.11%	22.07%	6.35%	2.90	4	4
Mumbai	8.72%	26.91%	36.61%	21.48%	6.29%	2.89	5	5

From table 32, we can see that: firstly, 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, Moscow, Mumbai, Sao Paulo and Johannesburg following behind.

（IX）Analysis of degree of currency international recognition

Degree of currency international recognition mainly focuses on the comparison of interviewees' recognition about the currencies of BRICS countries. 5 means fully recognizable, 4 represents somewhat recognizable; 3 represent neither; 2 represents not that recognizable; 1 shows have no recognition at all.

Table 33 Comparison of the currency international recognition index of BRICS countries

City	Score 1	Score 2	Score 3	Score 4	Score 5	Currency Knowledge Degree	Ranking 2012	Ranking 2011
RMB(China)	8.75%	17.93%	30.33%	24.73%	18.26%	3.258	1	1
Rupee(India)	11.52%	25.33%	35.33%	19.89%	7.93%	2.874	2	4
Real(Brazil)	12.55%	26.30%	32.61%	18.42%	10.11%	2.872	3	3
RBL(Russia)	12.50%	29.73%	35.11%	16.03%	6.63%	2.746	4	2
Rand (South Africa)	13.53%	31.52%	32.34%	14.89%	7.72%	2.717	5	5

Note: The percentage in the second column refers to the ratio of the number of respondents, who believes the internationalization level of the currency is "Score 1", to the total number of respondents. The percentages in the second column to the sixth column are calculated in the same way. If sum of the percentages are not equal to 100%, it is because of round-off error.

From table 33, respondents' scores on the currencies of BRICS countries are featured by:

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

Secondly, the difference between the RMB and the second place ruble is 0.38, and between the fifth place rand 0.54. The biggest difference among the other four currencies is 0.16. 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 is within the range of 3-4, the others are 2-4.

IV. Introduction to Research Approach of IFCD Index

(I) General framework

1. Research roadmap

The 2013 Xinhua-Dow Jones International Financial Center Development Index (IFCD Index 2013) continues to adopt the research roadmaps for the IFCD Index 2012，IFCD Index 2011 and the IFCD Index 2010. The calculation of the IFCD Index 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 5 shows the research roadmap for the formation of the IFCD Index. (Figure 5)

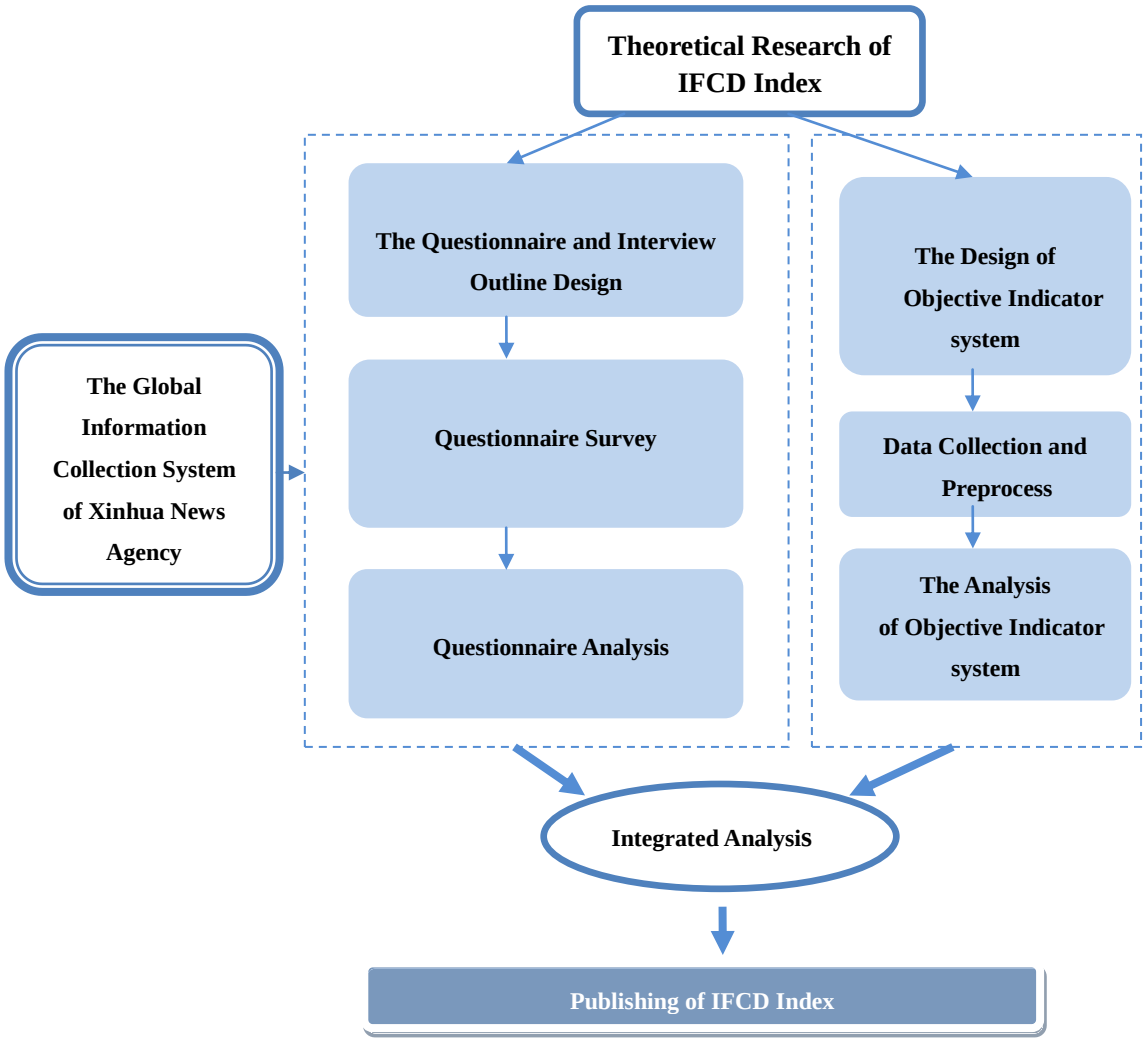


Figure 5 Research Route Map of IFCD Index 2013

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.

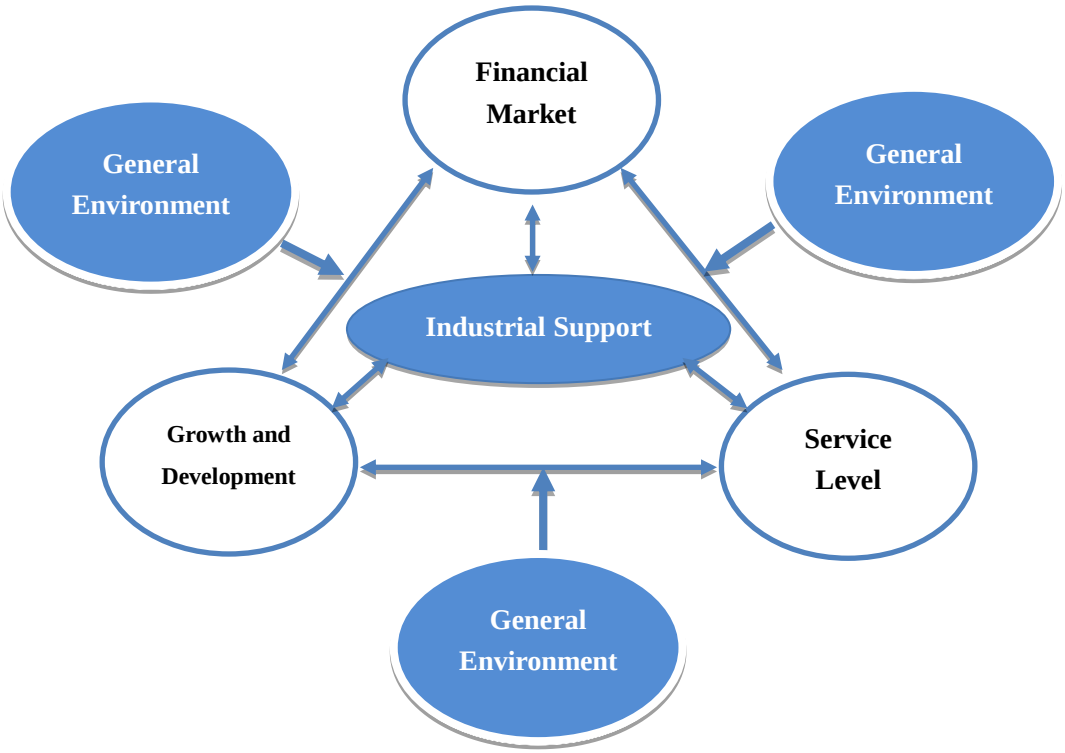


Figure 6 Indicator System of IFCD Index 2013

The first-level indicator of financial market includes four secondary indictors and 16 third-level indicators, mainly reflecting the scale, stability and maturity of capital market, forex market, banking market, and insurance market.

The first-level indicator of growth and development includes three secondary indicators and 12 third-level indictors, evaluating a city's growing and development capability from three aspects, namely the growth potential of the capital market, growth potential of the economy, and innovation potential reserves. Compared with the IFCD Index 2012, taking data availability into consideration, IFCD Index 2013 merges the secondary indicators of "Innovation Outputs" and "Innovation Potential" into the secondary indicator of "innovation potential reserves";As for third-level indicators, the indicators of

"Added Value of High-tech Products to Added Value of Manufacturing", "Employment in High-Tech Services per 1,000 inhabitants" and "Per Capita Expenditure on R&D performed by Government" into one indicator, technical innovation, whose data is got by the means of the "8b" subject(appendix III) in the questionnaire; the rest third-level indicators are consistent with those in IFCD Index 2012.

The first-level indicator of industrial support is made up by two secondary indicators and 10 third-level indicators, evaluating the capability of a financial supporting system from two aspects, namely the commercial environment of a region and intellectual capital. Compared with the IFCD Index 2012, IFCD Index 2013 uses the indicator of "intellectual capital", regarded as the talents element support of financial industry, as the secondary indicator of "industrial support" in order to demonstrate human capital's support to financial industry. In the third-level indicators, "multinational index", incorporated into the "commercial environment", and other five indicators embody industrial support environment of financial centers; the indicator of "Financial Services employment percentage" in "intellectual capital" is replaced by "talent accumulation" which evaluates financial centers' attractiveness to talents is got by means of "8d" subject in the questionnaire; the rest indicators are consistent with those in IFCD Index 2012.

The first-level indicator of service standard includes three secondary indicators and 11 third-level indicators, evaluating the service ability of a region's financial development from three aspects, namely Urban Infrastructure, social management and working and living. Compared with the IFCD Index 2012, IFCD Index 2013 shifts the "urban infrastructure", regarded as the indicator of city service level, into the "service standard" system so as to embody the basic service level of financial centers; "government service" is replaced by "social management" which includes "unemployment rate index" and "crime statistics" in order to embody the service level of social administration in financial centers; "urban living conditions" is replaced by "working and living" so that it can embody the level of service which financial centers supply to people' working and living; in the third-level indicators, "working environment" is got by means of the "8c" subject(appendix III) in the questionnaire.

The first-level indicator of general environment includes four secondary indicators and 15 third-level indicators, evaluating the region's general development in terms of economic environment, political environment, the degree of opening to the outside and physical environment. Compared with IFCD Index 2012, taking completeness into consideration, "geographical location" and "city population density" are combined as "physical environment" which is incorporated into the "general environment" system; "per capita GDP" is absorbed into "economic environment"; the rest third-level indicators are consistent.

3. Weight of indicators

Three consecutive years' surveys embody interviewees' acknowledge of the importance of the five first-level indicators is stable although every year's sample size differs, this shows that the weights of Xinhua-Dow Jones International Financial Centers Development Index are of science and stability. So, IFCD Index 2013 uses the last two years' weights of first-level indicators, which 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 valid questionnaires, the weights of the five first-level indicators can be worked out, which is shown in the Table 34.

Table 34 Weights of the first-level indicators in IFCD Index 2013

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

Note: If sum of weighted value of five indicators is not equal to 1, it is because of round-off error.

Within the IFCD Index 2013 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 IFCD Index 2013 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 IFCD Index 2013 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

Xinhua News Agency's global information collection network mainly survey the following details:

(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.

2. In-depth interviews with experts

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 Index indicators

The calculation of the IFCD Index 2013 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.

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.

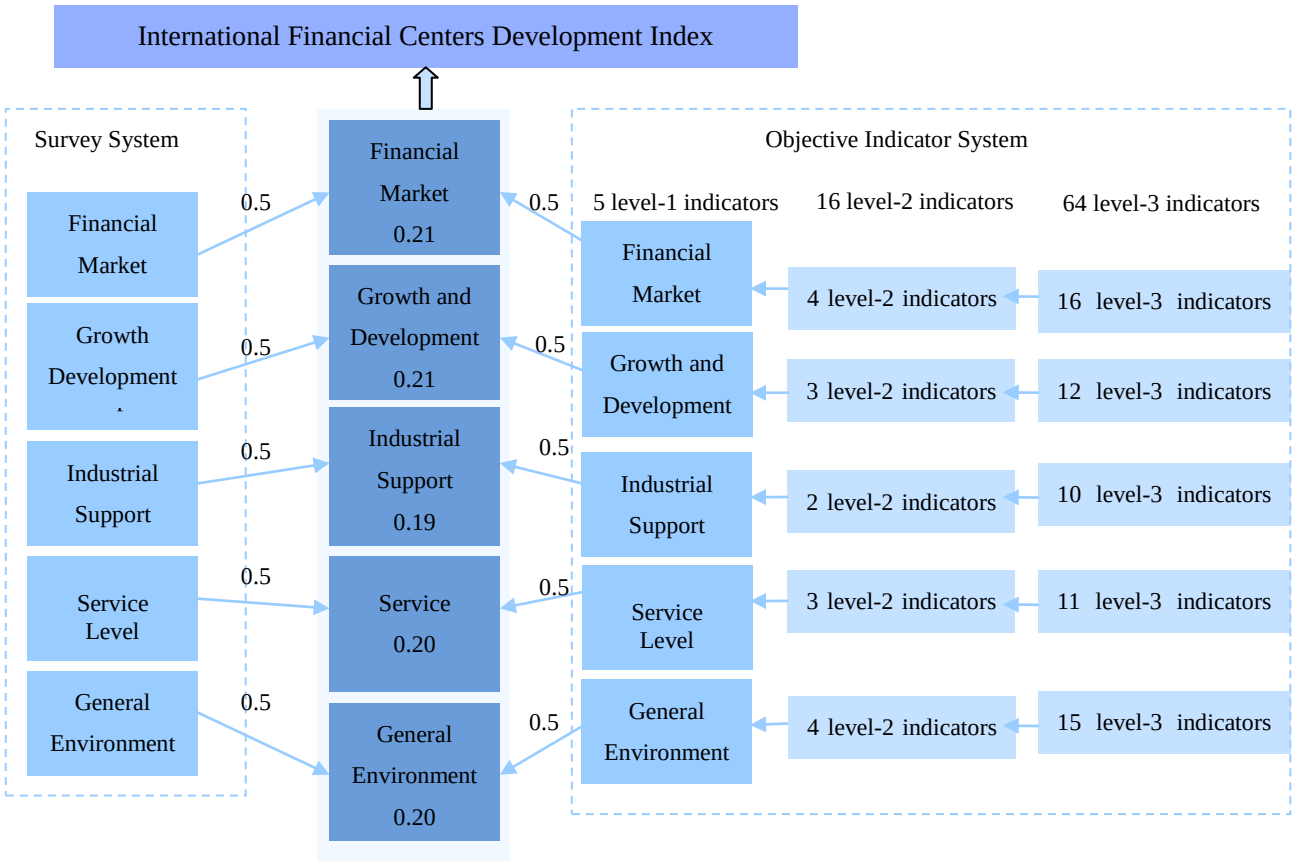
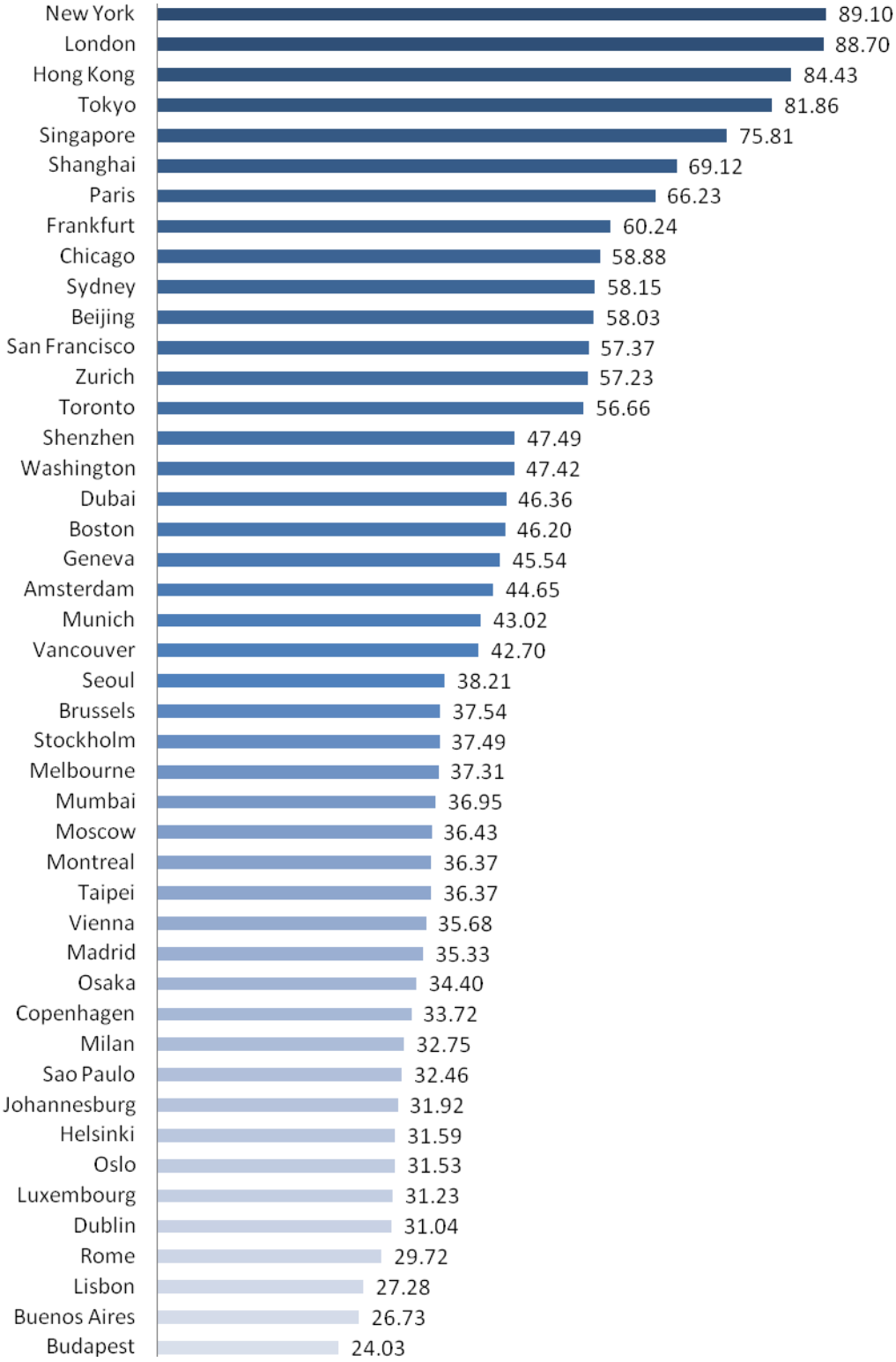


Figure 7 Construction Structure of IFCD Index 2013

Appendix I: Figures and Tables of IFCD Index 2013



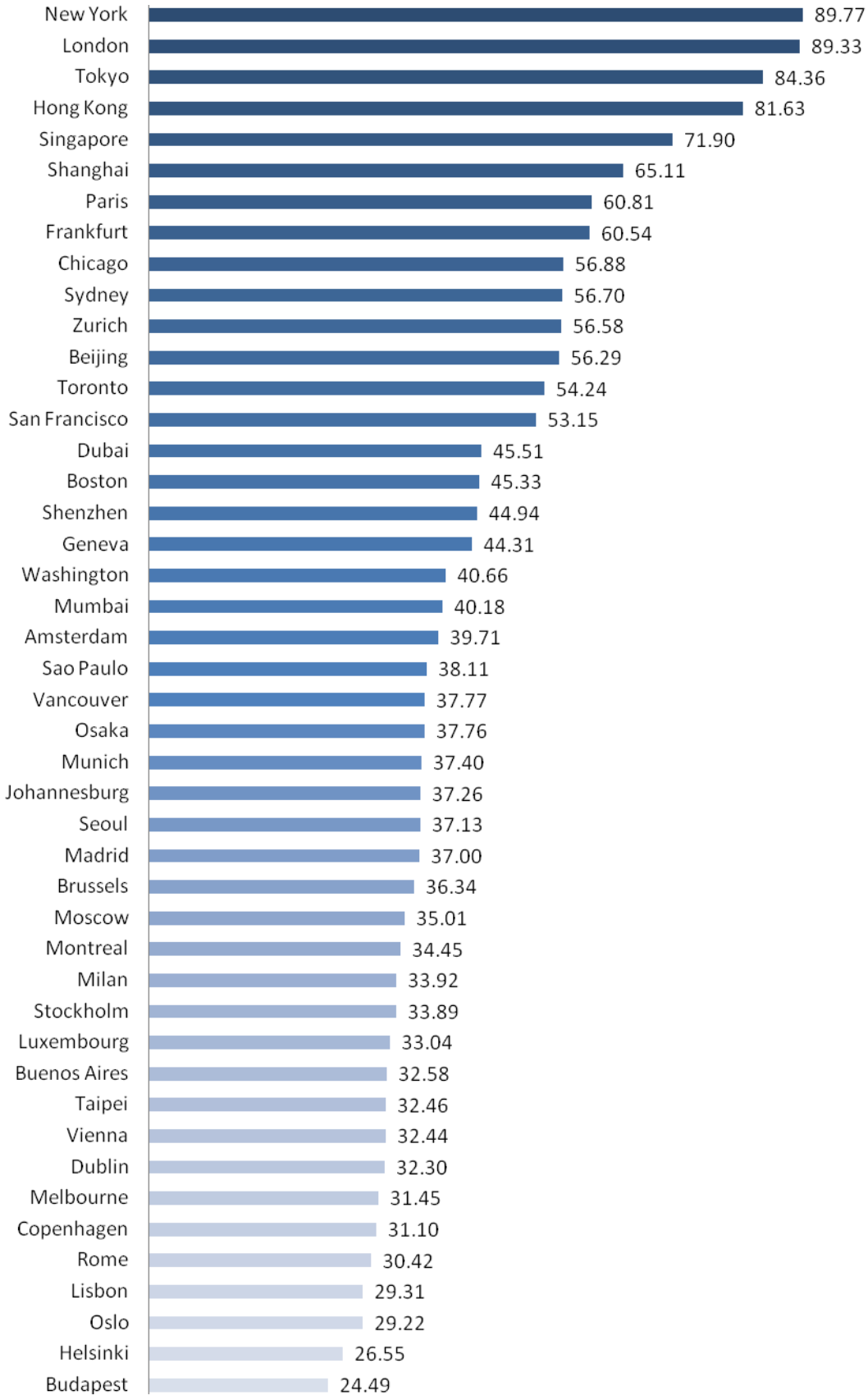
Attached Figure 1 Results of IFCD Index 2013

Attached Table1 Ranking Comparison of IFCD Index 2013and IFCD Index 2012

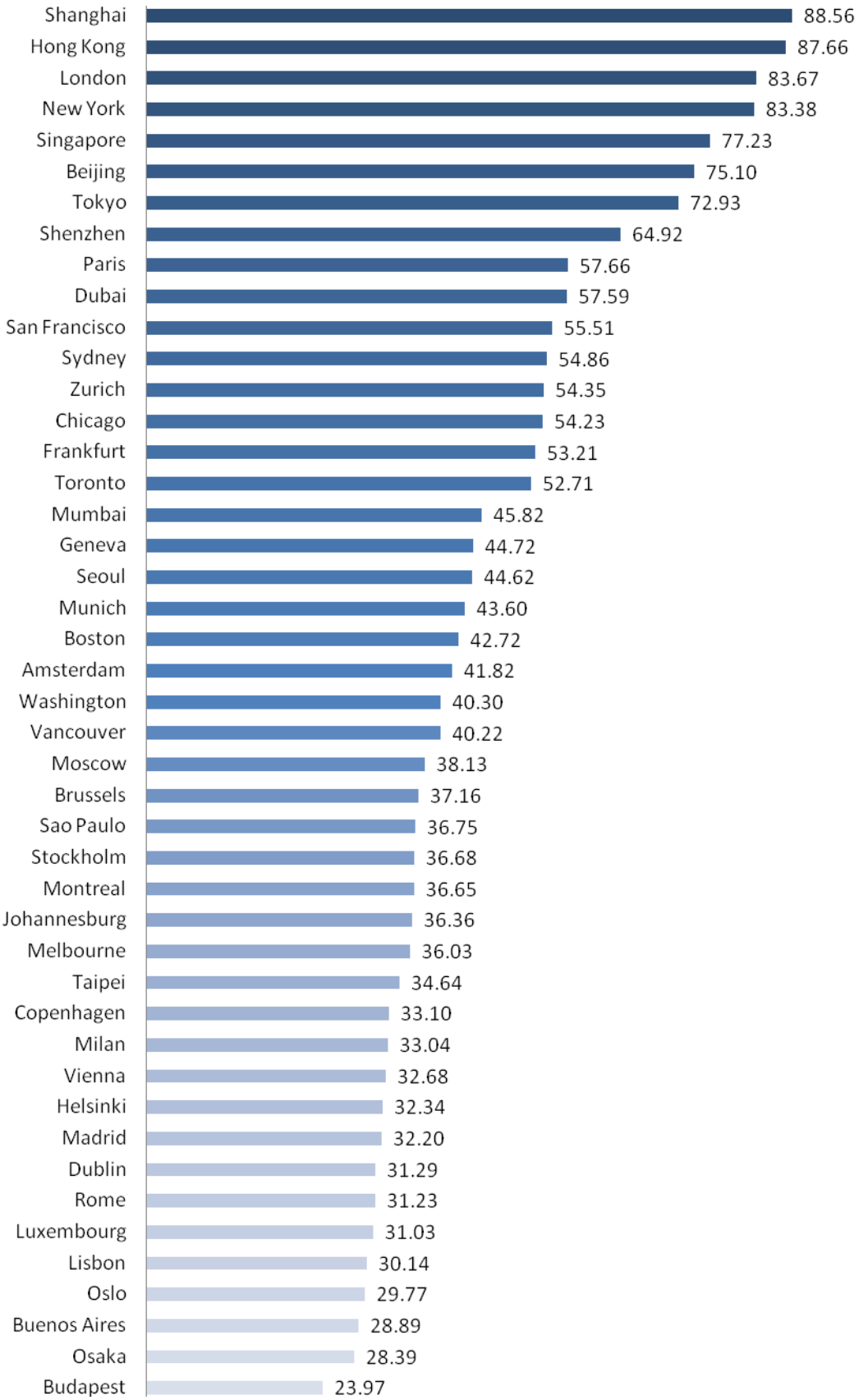
CITY	Financial Market		Growth and Development		Industrial Support		Service Level		General Environment		IFCD		Change in rank	ABS of change in rank
	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012		
New York	1	1	4	2	1	1	1	1	2	1	1	1	0	**0**
London	2	2	3	3	2	2	2	2	1	2	2	2	0	**0**
Hong Kong	4	4	2	4	4	5	4	4	3	3	3	4	1	**1**
Tokyo	3	3	7	6	3	3	3	3	4	5	4	3	-1	**1**
Singapore	5	7	5	7	6	6	5	6	5	6	5	5	0	**0**
Shanghai	6	6	1	1	5	4	14	12	13	16	6	6	0	**0**
Paris	7	8	9	9	8	9	6	5	6	8	7	8	1	**1**
Frankfurt	8	5	15	10	10	7	9	7	8	4	8	7	-1	**1**
Chicago	9	10	14	13	9	10	10	9	12	13	9	10	1	**1**
Sydney	10	12	12	15	12	14	8	10	10	12	10	12	2	**2**
Beijing	12	11	6	5	7	8	19	35	26	27	11	11	0	**0**
San Francisco	14	13	11	12	11	13	11	14	11	19	12	13	1	**1**
Zurich	11	9	13	11	15	12	7	8	7	7	13	9	-4	**4**
Toronto	13	14	16	20	13	18	12	15	9	11	14	16	2	**2**
Shenzhen	17	20	8	8	14	17	27	40	31	36	15	19	4	**4**
Washington	19	17	23	19	17	19	13	16	15	20	16	17	1	**1**
Dubai	15	16	10	17	16	16	21	27	30	32	17	18	1	**1**
Boston	16	19	21	23	18	29	15	17	18	28	18	20	2	**2**
Geneva	18	15	18	22	28	27	16	11	14	9	19	15	-4	**4**
Amsterdam	21	18	22	21	20	11	17	13	16	10	20	14	-6	**6**
Munich	25	27	20	25	22	21	20	26	20	22	21	21	0	**0**
Vancouver	23	33	24	24	24	26	18	24	17	23	22	25	3	**3**
Seoul	27	22	19	14	19	15	36	37	36	35	23	24	1	**1**

CITY	Financial Market		Growth and Development		Industrial Support		Service Level		General Environment		IFCD		Change in rank	ABS of change in rank
	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012		
Brussels	29	21	26	28	33	35	25	22	22	21	24	22	-2	**2**
Stockholm	33	28	28	29	35	34	24	18	19	17	25	23	-2	**2**
Melbourne	39	36	31	26	30	23	22	23	21	26	26	29	3	**3**
Mumbai	20	23	17	18	23	22	38	39	42	41	27	30	3	**3**
Moscow	30	25	25	16	21	20	37	41	35	43	28	31	3	**3**
Montreal	31	37	29	31	32	38	28	30	24	25	29	32	3	**3**
Taipei	36	31	32	27	26	33	26	36	29	33	30	36	6	**6**
Vienna	37	32	35	37	36	31	23	19	23	14	31	26	-5	**5**
Madrid	28	24	37	30	25	25	33	25	32	30	32	28	-4	**4**
Osaka	24	30	44	38	27	28	31	34	33	34	33	37	4	**4**
Copenhagen	40	38	33	34	38	30	29	20	25	15	34	27	-7	**7**
Milan	32	26	34	33	29	24	35	33	38	39	35	35	0	**0**
Sao Paulo	22	41	27	39	31	42	41	45	43	44	36	43	7	**7**
Johannesburg	26	44	30	45	34	45	42	44	41	45	37	45	8	**8**
Helsinki	44	42	36	36	42	39	32	21	28	24	38	33	-5	**5**
Oslo	43	35	42	44	41	37	34	32	27	18	39	34	-5	**5**
Luxembourg	34	34	40	40	40	40	30	28	37	29	40	38	-2	**2**
Dublin	38	39	38	32	39	36	40	31	34	31	41	39	-2	**2**
Rome	41	29	39	35	37	32	39	29	39	37	42	40	-2	**2**
Lisbon	42	40	41	41	45	41	44	38	40	38	43	41	-2	**2**
Buenos Aires	35	43	43	42	43	43	43	43	45	42	44	42	-2	**2**
Budapest	45	45	45	43	44	44	45	42	44	40	45	44	-1	**1**

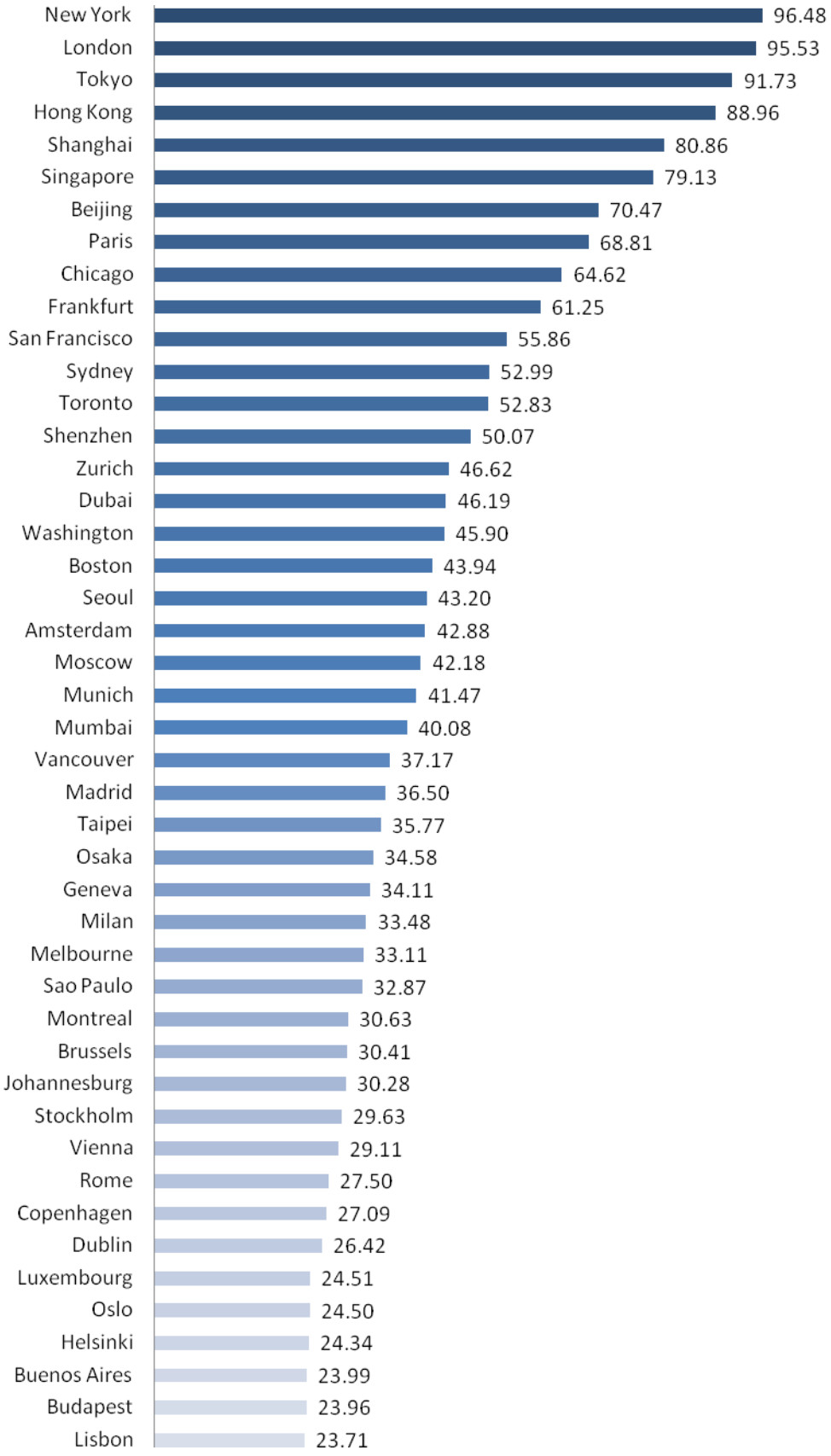
- *Note: The colors in last column represent rank fluctuation of International Financial Center in recent two years. Blue represents completely stable. Red represents somewhat stable.Green represents volatile. Gray represents abnormal fluctuation.*



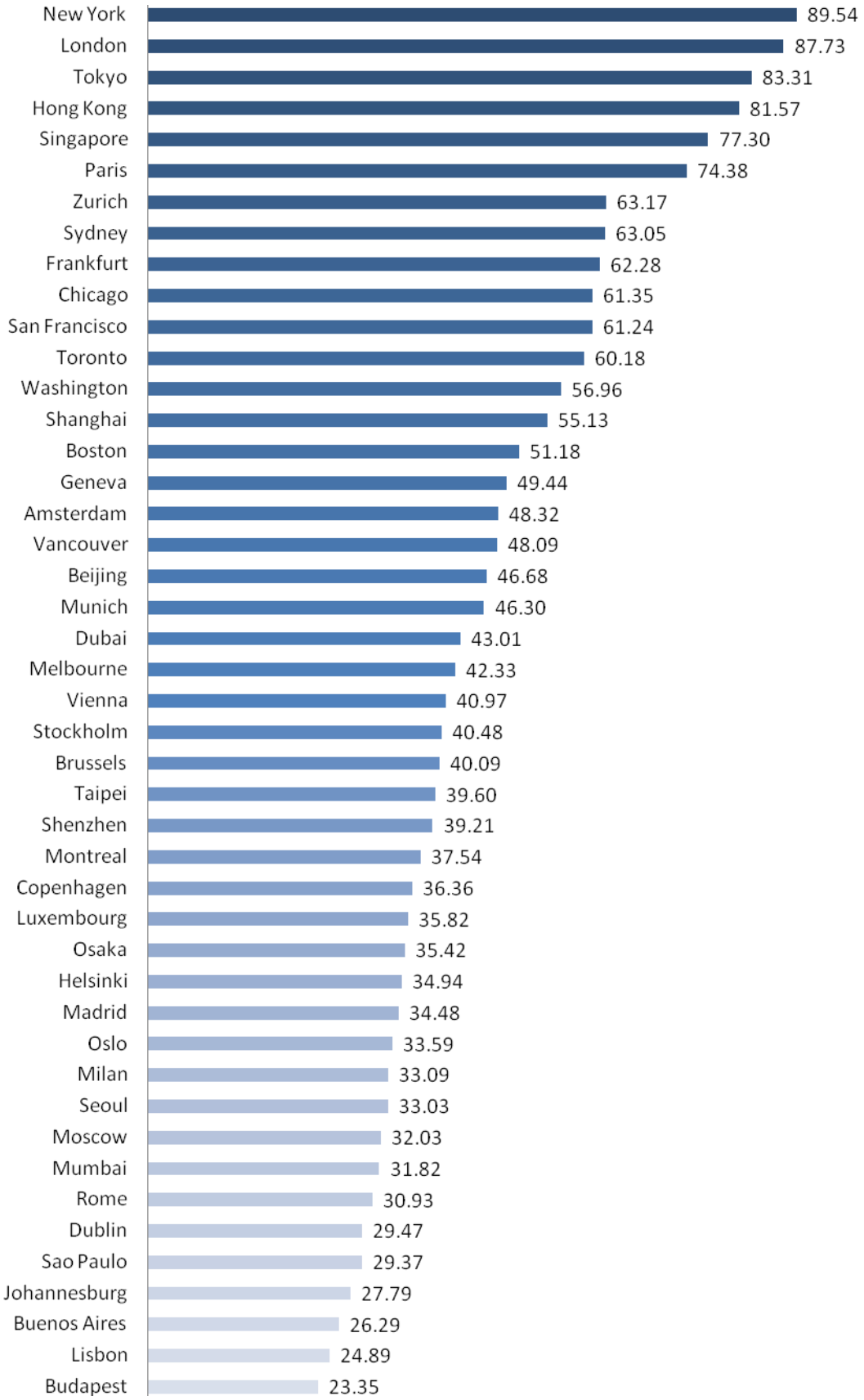
Attached Figure 2 The Financial Market Ranking of IFCD Index 2013



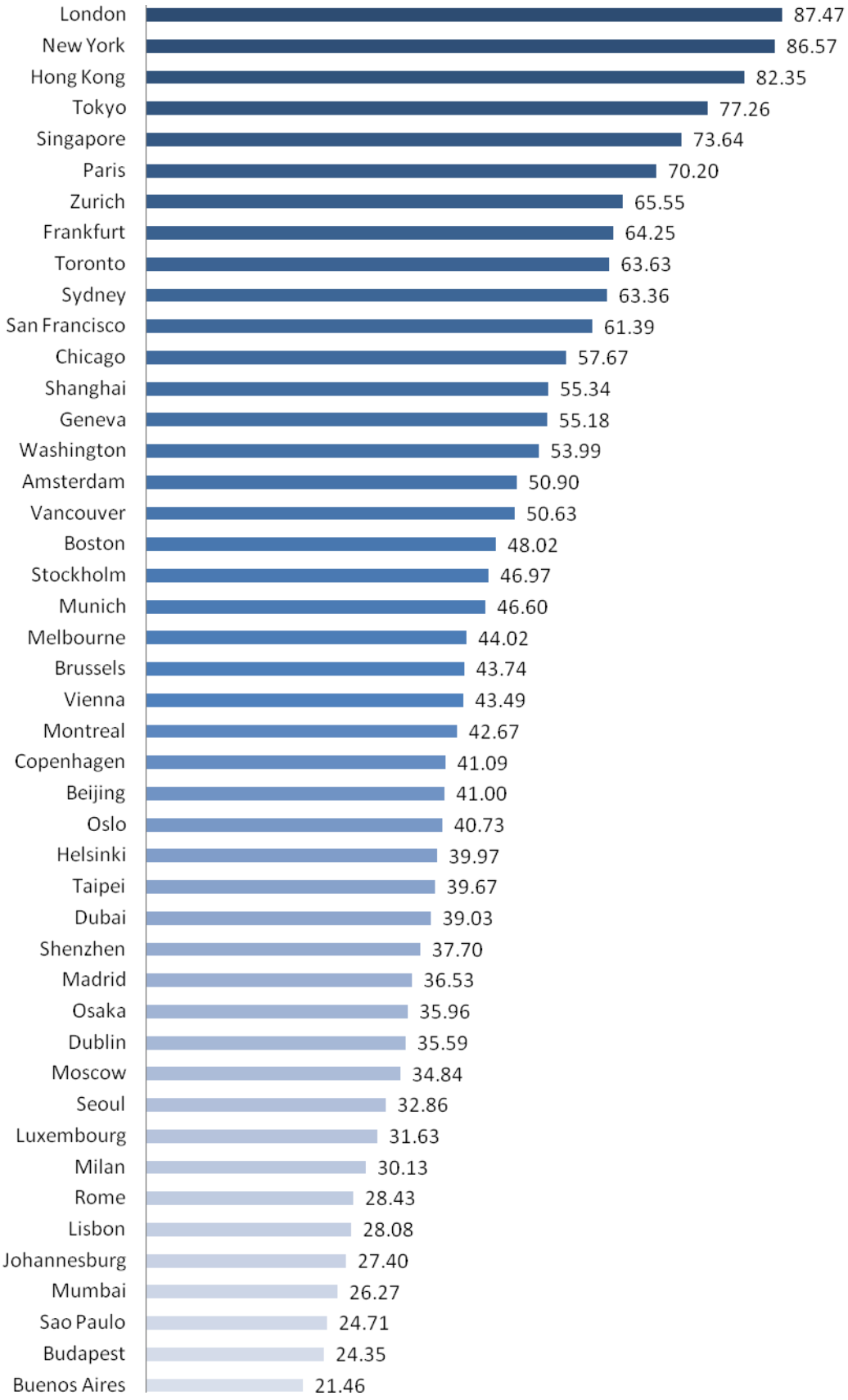
Attached Figure 3 The Growth and Development Ranking of IFCD Index 2013



Attached Figure 4 The Industrial Support Ranking of IFCD Index 2013



Attached Figure 5 The Service level Ranking of IFCD Index 2013



Attached Figure 6 The General Environment Ranking of IFCD Index 2013

Appendix II: IFCD Index Survey System

(I) About the questionnaires

The data for index analysis in 2013 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 4,856valid questionnaires with high-quality data. The selection of samples follows the following standards:

First, professionals of financial industry account for about 60 percent of the total;

Secondly, senior executives account for about 60 percent;

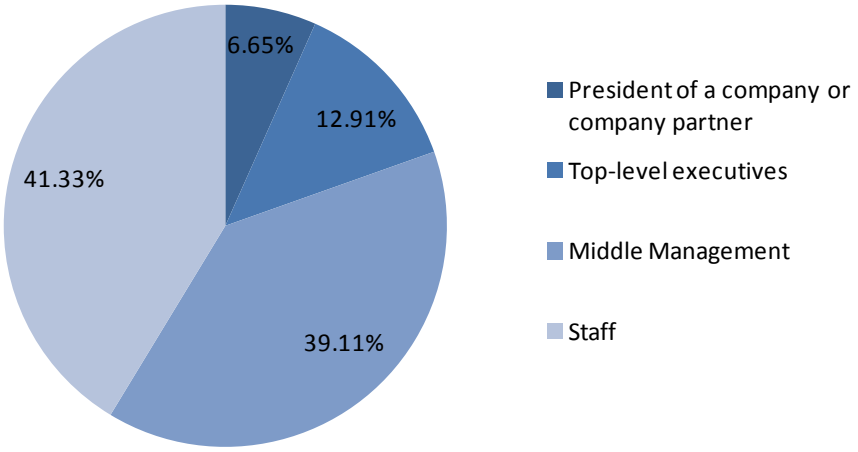
Thirdly, the regional distribution of the samples adopts equal weight for the 45 sampled cities;

Fourthly, the amount of samples meets professional statistical requirements.

(II) Basic information of questionnaires

1. Job title

Of the 4, 856 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 41.3 percent of the total survey respondents.



Attached Figure 7 Distribution of Respondents' Job Title

2. Industries worked in by respondents

Some 23.4 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 Table 2 Industries worked in by respondents

Industry	Count	Proportion (%)
Investment Bank	216	4.45
Commercial Bank	361	7.43
Retail Bank	365	7.52
Insurance	412	8.48
Asset Management	362	7.45
Legal Services	285	5.87
Accounting Services	603	12.42
Trade Association	570	11.74
Regulatory Bodies/ Central Bank	59	1.21
Government Bodies	1138	23.43
Scientific & Research Institutions	485	9.99
Others	0	0
Total	4856	100

3. Location of respondents

The sampling is conducted according to the principle that the regional distribution of the samples adopts equal weight for the 45 sampled cities. The numbers of samples in the location of respondents are as followings, of which the numbers of Asian-Pacific and North America regions are bigger than others, the European region is lower than others.

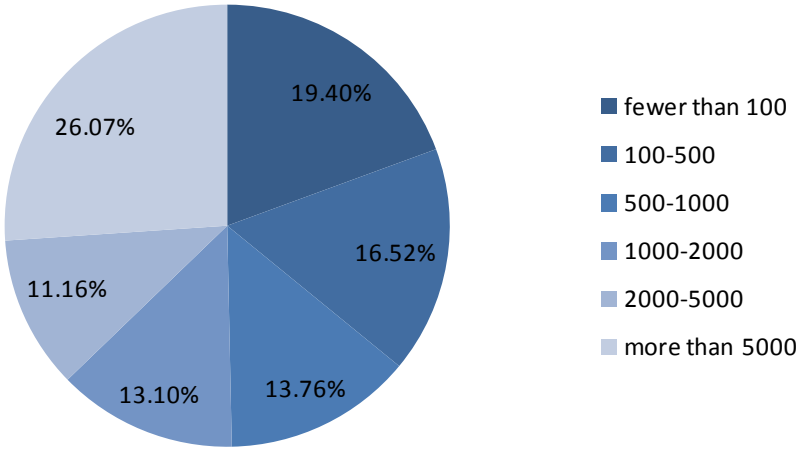
Attached Table 3 Locations of questionnaires' respondents

City	Sample Amount	Proportion (%)	City	Sample Amount	Proportion (%)
Mumbai	154	3.17	Sao Paulo	103	2.12
Osaka	151	3.11	Madrid	96	1.98
New York	148	3.05	Frankfurt	95	1.96
Beijing	147	3.03	Moscow	94	1.94
London	146	3.01	Stockholm	94	1.94
Shenzhen	146	3.01	Lisbon	94	1.94
Paris	145	2.99	Munich	91	1.87
Toronto	145	2.99	Seoul	90	1.85
Melbourne	145	2.99	Rome	89	1.83
Sydney	145	2.99	Milan	88	1.81
Chicago	143	2.94	Copenhagen	87	1.79
Singapore	142	2.92	Amsterdam	86	1.77
Shanghai	141	2.90	Helsinki	83	1.71
Tokyo	138	2.84	Buenos Aires	83	1.71
Hong Kong	138	2.84	Dubai	83	1.71
Dublin	136	2.80	Vienna	78	1.61
Taipei	134	2.76	Johannesburg	76	1.57

Washington	126	2.59	Brussels	61	1.26
San Francisco	126	2.59	Budapest	57	1.17
Vancouver	120	2.47	Oslo	52	1.07
Montreal	116	2.39	Geneva	28	0.58
Boston	107	2.20	Luxembourg	3	0.06
Zurich	106	2.18	Total	4856	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 26.1 percent. Organizations with less than 100 staff account for 19.4 percent. Proportion of organizations with staff account from 100 to 500 ranks the third, at 16.5 percent. And the other three types of organizations respectively account for about 11 to 15 percent. It shows that scale of surveyed organizations is relatively even.



Attached Figure 8 Distribution of Respondents' Organization Size

(Ⅲ) Further analysis

1. Valuation of each factor by respondents from various industries

Altogether 4,856 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 1,775 questionnaires from financial cycle and 3,081 questionnaires from non-financial respondents.

Adopting the same analysis method with the previous two years, we planned to list the top 20 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 Table 4 Financial and non-financial institution staff's valuation of financial markets

Ranking	Financial Staff		Non-financial Staff	
	City	Proportion (%)	City	Proportion (%)
1	New York	33.07	New York	29.67
2	London	28.28	London	23.04
3	Hong Kong	19.38	Hong Kong	14.28
4	Tokyo	14.31	Tokyo	13.66
5	Singapore	12.96	Singapore	9.19
6	Shanghai	10.2	Frankfurt	7.82
7	Paris	10.03	Shanghai	7.59
8	Frankfurt	9.97	Paris	7.53
9	Chicago	8.11	Sydney	6.65
10	Zurich	7.89	Washington	6.52
11	Washington	7.44	Zurich	6.49
12	Beijing	7.15	Toronto	6.49
13	Toronto	7.04	Chicago	6.07
14	San Francisco	6.87	Beijing	5.78
15	Sydney	6.7	San Francisco	4.93
16	Geneva	5.18	Dubai	4.74
17	Dubai	5.18	Geneva	4.51
18	Boston	4.9	Boston	4.41
19	Milan	4.68	Melbourne	4.02
20	Amsterdam	4.34	Amsterdam	3.99

Note: The "Proportion" in the third column is the ratio of the number of Financial Staff who believe the city is outstanding to the total number of Financial Staff. The "Proportion" in the fifth column is the ratio of the number of Non-financial Staff who believe the city is outstanding to the total number of Non-financial Staff. The proportions in the Attached table from 5 to 8 are calculated in the same way.

From attached table 4 we know that, the responses of financial and non-financial institution staff show no significant difference when evaluating the top 5 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 Shanghai, Paris, Frankfurt, Chicago, Zurich, Beijing, San Francisco, Geneva, and Milan is higher than that of non-financial staff; their acceptance of Washington, Toronto, Sydney and Dubai is lower than that of non-financial staff; their acceptance of Boston and Amsterdam is almost the same.

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

Ranking	Financial Staff		Non-financial Staff	
	City	Proportion (%)	City	Proportion (%)
1	Shanghai	22.54	Shanghai	21.65
2	Hong Kong	17.24	Hong Kong	15.32
3	New York	16.39	New York	12.98
4	London	15.15	London	12.17
5	Singapore	11.77	Tokyo	10.29
6	Tokyo	10.93	Singapore	9.15
7	Beijing	9.41	Beijing	8.41
8	Paris	7.21	Paris	5.84
9	Dubai	7.21	Sydney	5.62
10	Chicago	7.1	Dubai	5.49
11	Frankfurt	6.93	Toronto	5.32
12	San Francisco	6.42	Washington	5.29
13	Sydney	6.37	Frankfurt	5.26
14	Zurich	6.31	Zurich	5.06
15	Washington	6.31	Chicago	5.03
16	Toronto	5.69	San Francisco	5
17	Mumbai	5.07	Shenzhen	4.74
18	Shenzhen	4.56	Seoul	4.45
19	Boston	4.17	Melbourne	4.25
20	Vancouver	4.11	Mumbai	3.8

From attached table 5 we know that, both financial and non-financial institution staffs have highly accepted the performance of Shanghai in terms of growth and development, which shows that Shanghai is generally accepted as international financial centers according to growth and development. Both show no significant difference in evaluating the performance in terms of growth and development of Hong Kong, New York, London, Beijing, Paris and Zurich, but major difference when it comes to other cities. Financial staff's acceptance of Singapore, Dubai, Chicago, Frankfurt, San Francisco, Mumbai and Vancouver is higher than that of non-financial staff; their acceptance of Sydney, Washington, Toronto and Shenzhen is lower than that of non-financial staff.

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

Ranking	Financial Staff		Non-financial Staff	
	City	Proportion (%)	City	Proportion (%)
1	New York	26.42	New York	21.65
2	London	19.89	London	16.03
3	Hong Kong	15.94	Tokyo	12.37
4	Tokyo	14.37	Hong Kong	10.45
5	Singapore	11.1	Shanghai	7.98
6	Shanghai	10.76	Singapore	7.21
7	Frankfurt	8.62	Chicago	6.88
8	Beijing	8.34	Beijing	6.56
9	Paris	7.89	Frankfurt	6.46
10	Chicago	7.66	Paris	6.36
11	Washington	6.82	Washington	6.17
12	Zurich	6.42	Toronto	5.42
13	Toronto	6.2	Sydney	5.1
14	San Francisco	6.2	San Francisco	4.71
15	Sydney	5.97	Zurich	4.45
16	Dubai	5.52	Amsterdam	4.12
17	Boston	5.01	Melbourne	4.09
18	Milan	4.79	Boston	3.99
19	Mumbai	4.62	Dubai	3.7
20	Vancouver	4.51	Seoul	3.6

As shown in attached table 6, financial and non-financial institution staff post small differences on the recognition of New York, London, Hong Kong, Tokyo, Shanghai, Beijing, Paris, Washington, Toronto and San Francisco in terms of industrial support. Financial staff show a higher recognition of such cities as Frankfurt, Zurich, Dubai, Mumbai, Vancouver; while non-financial staff exhibit higher recognition of Chicago, Amsterdam, Melbourne and Seoul.

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

Ranking	Financial Staff		Non-financial Staff	
	City	Proportion (%)	City	Proportion (%)
1	New York	26.37	New York	20.32
2	London	20.73	London	18.53
3	Hong Kong	15.83	Tokyo	13.08
4	Tokyo	13.46	Hong Kong	11.26
5	Singapore	11.66	Paris	8.89
6	Paris	10.2	Singapore	8.15
7	Frankfurt	8.28	Washington	7.04
8	Shanghai	7.83	Sydney	6.36
9	Washington	7.72	Toronto	6.26
10	Chicago	7.1	Frankfurt	6
11	Zurich	7.04	Chicago	5.97
12	Sydney	6.7	Zurich	5.55
13	San Francisco	6.48	Shanghai	5.32
14	Toronto	6.08	San Francisco	5.03
15	Beijing	6.03	Melbourne	4.93
16	Dubai	5.18	Vancouver	4.45
17	Boston	5.13	Amsterdam	4.28
18	Geneva	4.85	Boston	4.22
19	Milan	4.06	Dubai	4.19
20	Vancouver	4.06	Beijing	4.12

As shown in attached table 7, financial and non-financial institution staff post small differences on the recognition of New York, London, Hong Kong, Tokyo, Paris, Washington, Zurich, San Francisco. Financial staff show a higher recognition of such cities as Frankfurt, Shanghai, Beijing, Dubai, Mumbai, Geneva; while non-financial staff exhibit higher recognition of Washington, Sydney, Toronto, Vancouver, Amsterdam.

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

Ranking	Financial Staff		Non-financial Staff	
	City	Proportion (%)	City	Proportion (%)
1	New York	27.32	New York	22.59
2	London	20.06	London	17.92
3	Hong Kong	14.48	Hong Kong	10.32
4	Tokyo	10.54	Tokyo	9.25
5	Singapore	9.8	Paris	7.79
6	Paris	8.56	Washington	7.11
7	Frankfurt	8.23	Singapore	6.78
8	Washington	7.38	Sydney	6.59
9	Chicago	6.87	Toronto	5.97
10	Zurich	6.42	Zurich	5.71
11	San Francisco	6.31	Frankfurt	5.45
12	Toronto	6.2	San Francisco	5.42
13	Shanghai	6.2	Chicago	4.77
14	Sydney	5.92	Melbourne	4.38
15	Boston	4.73	Amsterdam	4.25
16	Beijing	4.56	Shanghai	4.22
17	Dubai	4.51	Geneva	4.19
18	Geneva	4.45	Vancouver	3.96
19	Vancouver	3.89	Beijing	3.6
20	Melbourne	3.83	Boston	3.54

From attached table 8 we know that, the responses of financial and non-financial institution staff show no significant difference when evaluating the top 5 cities' performance in terms of their general environment, but both exhibit major differences as for other cities. Financial staff exhibit a higher recognition of such cities as Frankfurt, Chicago, Shanghai, Boston, Beijing, Dubai; while non-financial staff exhibit higher recognition of Washington, Sydney, Toronto, Melbourne Amsterdam.

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?				
	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		Taibei
	Luxembourg		San Francisco		Hongkong
	London		Montreal		Johannesburg
	Rome		New York		Melbourne
	Madrid		Sao Paulo		Sydney

Q7	The Evaluation of International Financial Center Development Capability (Multiple choices allowed):
Q7a	Of the cities you understand, which do they perform well in Financial markets?
Q7b	Of the cities you understand, which do they perform well in Growth and development?
Q7c	Of the cities you understand, which do they perform well in Industry support?
Q7d	Of the cities you understand, which do they perform well in Service levels?
Q7e	Of the cities you understand, which do they perform well in General environment?

Q8	The Evaluation of indicator system (Multiple choices allowed):
Q8a	Of the cities you understand, which do they perform well in terms of insurance services offered?
Q8a	Of the cities you understand, which do they perform well in terms of Science and technology innovation potential?
Q8a	Of the cities you understand, which do they perform well in terms of work and life environment?
Q8a	Of the cities you understand, which do they perform well in terms of talent attractiveness?

Q9	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

Q10-13	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.

Q10	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.	_	_	_	_	_
Q11	Shanghai	Sao Paulo	Mumbai	Moscow	Johannesburg
Abundant degree of financial products focuses: richness and diversification of financial products such as bonds, stocks, futures, commodities, foreign exchange, funds in each city.	_	_	_	_	_
Degree to which the city has shown innovativeness in financial products, financial system, financial services, etc.	_	_	_	_	_
Q12	Shanghai	Sao Paulo	Mumbai	Moscow	Johannesburg
Degree of financial facilities focuses on comparisons of the degree of facility of financing channels and financing policies in each city					
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.	_	_	_	_	_
Q13	Shanghai	Sao Paulo	Mumbai	Moscow	Johannesburg
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.					
Degree to which policies in areas such as taxation	_	_	_	_	_

Q14	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

Q15	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	CIA	https://www.cia.gov/index.html
		Exchange Rate Volatility	WFE	http://www.world-exchanges.org
	Banking Market	Number of Major Bank	Forbs	http://www.forbeschina.com
		Major Bank Assets	Forbs	http://www.forbeschina.com
		Central Bank Assets To GDP	World Economic Forum	http://www.weforum.org
		Bank Assets To GDP	World Economic Forum	http://www.weforum.org
	Insurance Market	Insurance Premium	World Economic Forum	http://www.weforum.org
		Growth of Insurance Premium	World Economic Forum	http://www.weforum.org
		Insurance Services Level	The Global Information Collection System of Xinhua News Agency	
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	World Bank	http://data.worldbank.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	OECD	http://stats.oecd.org/

Level-1 Indicator	Level-2 Indicator	Level-3 Indicator	Data Source	Website
	Innovation Potential reserves	**Three Year Average Growth Rate of Domestic Purchasing Power**	UBS	http://www.ubs.com
		scientific and technological innovation capacity	The Global Information Collection System of Xinhua News Agency	
		Five Year Average Growth Rate of Government R & D Expenditures	OECD	http://stats.oecd.org/
		Five Year Average Growth Rate of Government R & D People	UNESCO	http://stats.uis.unesco.org/
		Innovation index	INSEAD	http://www.globalinnovationindex.org/gii/
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
	Intellectual Capital	**talent attractiveness**	The Global Information Collection System of Xinhua News Agency	
		Per Capita Public Expenditures on Higher Education	OECD	http://stats.oecd.org/
		Population Education Level	UNDP	http://hdrstats.undp.org/en/tables/index.html
		Number of Universities	Global Urban Competitiveness Project	http://www.gucp.org
	Urban Infrastructure	**Cargo Throughput**	Global Urban Competitiveness Project	http://www.gucp.org
		Airline carriers	Airports Council International	http://www.aci.aero/
		IT Infrastructure	World Economic Forum	http://www.weforum.org
Service Level	**social management**	**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://unpan3.un.org/egovkb/global_reports/12report.htm
		Unemployment Rate Index	World Economic Forum	http://www.weforum.org
		Crime Statistics	UNODC	http://www.unodc.org/
	Working and Life	**Cost of Living**	UBS	http://www.ubs.com
		Quality of Living Index	Mercer HR	http://www.mercerhr.com
		work environment	The Global Information Collection System of Xinhua News Agency	

Level-1 Indicator	Level-2 Indicator	Level-3 Indicator	Data Source	Website
General Environment	Economic Environment	Per Capita GDP	World Bank	http://data.worldbank.org
		Ease of Doing Business	World Bank	http://www.doingbusiness.org/economyrankings
		Total Foreign Trade Volume	World Bank	http://data.worldbank.org/
		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 Stability and Absence of Violence	World Bank	http://info.worldbank.org/governance/wgi/index.asp
		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
	natural environment	Geographical Location	Global Urban Competitiveness Project	http://www.gucp.org
		City Population Density	Wikipedia	http://en.wikipedia.org/wiki/Population_density