Xinhua-Dow Jones International Financial Centers Development Index (2011)

July 8<sup>th</sup>, 2011

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# Xinhua-Dow Jones International Financial Centers Development Index -2011

Xinhua News Agency linked up with the Chicago Mercantile Exchange (CME) Group in 2010 to launch the Xinhua-Dow Jones International Financial Centers Development (IFCD) Index to the world. More than 300 mainstream media worldwide including Xinhua News Agency, Dow Jones, and Thomson-Reuters have used it as the basis of more than 400 reports.

The Xinhua-Dow Jones IFCD Index follows the principle of being "scientific and impartial", fully combining subjective evaluation and objective data, and taking development and growth as an important indicator of R&D. It is not only concerned about stock but also paying attention to growth, and its evaluation system includes significant elements reflecting international financial patterns and the flow of global finance.

The Xinhua-Dow Jones IFCD Index fully reflects the influence of the changing world situation on the development of international financial centers in the past year.

Currently, great uncertainties still exist in recovery of the global economy. The debt crisis of developed countries is unlikely to fade away in short term; there have been no substantive changes in the high unemployment rate and lingering economic recovery in Europe and the US; post-disaster construction of Japan faces large funding gap; emerging economies have achieved rapid economic growth amid recovery.

Against these financial backgrounds, although the fast flow of regional financial factors have had some influence on the fluctuations in global inflation and growth, it is clear that national financial centers of emerging economies have made great progress in expanding their capacity to absorb capital and engage in financial risk hedging, which has been reflected by the renewed Xinhua-Dow Jones International Financial Centers Development Index, the Xinhua-Dow Jones IFCD-2011.

The influence of international financial centers to some extent decides a country's capacity for financial factor allocation, which plays an important role on a country's economic development. This is the core value of the Xinhua-Dow Jones IFCD-2011's comprehensive evaluation of the development level and capacity of international financial centers. The Xinhua-Dow Jones IFCD-2011 pays more attention to the growth of international financial centers, endeavoring to probe the ability of international financial centers to optimize factor allocation under development and form positive interaction with the balanced development of the global economy.

The Xinhua-Dow Jones IFCD-2011 continues to hold the development concept of sustainability and inclusiveness and evaluating new situations and new methods, to

provide comprehensive evaluation of 45 global financial center cities. With the methodology continuingly being developed, the index makes vertical and horizontal comparisons, summarizes experience and highlights differences, provides effective decision support for related institutions and presents a brand-new study paradigm for experts and scholars.

#### I. Comprehensive evaluation results of IFCD

In 2011, in light of the indicators and data of last year calculated in comparable terms and based on all-around statistics and analysis, the research group worked through a complex ranking of 45 international financial centers in terms of development capacity. The top 10 are New York, London, Tokyo, Hong Kong, Singapore, Shanghai, Paris, Frankfurt, Sydney, and Amsterdam. In comparison with 2010, there have been no significant changes in the ranking of the top 10 cities. Shanghai advances by two to the sixth position and Sidney rises by one to be ninth. Washington, ranking tenth in 2010, is replaced by Amsterdam this year.

As for the observation of emerging economies, the research group specially designed three indexes including a confidence index, capital and human resources attraction index, and a currency familiarity index for the BRICS nations (Brazil, Russia, India, China and South Africa) due to their importance to the global economic growth, which provides authoritative evaluation and analysis for completely and systematically understanding the BRICS nations. Analysis of the statistics shows that the survey subjects worldwide are generally optimistic about the development capacity of financial centers in the BRICS nations. And Shanghai, followed by St. Paul, Moscow, Johannesburg, and Mumbai, are seen as the most likely to become one of global leading international financial centers. In terms of attraction of human resources and capital, Shanghai ranks the highest, while of the currencies of the BRICS nations, survey respondents are most familiar with the RMB.

#### (I) Analysis of the comprehensive quality of international financial

#### centers

The Xinhua-Dow Jones IFCD-2011, based on principles of science and fairness, chose 45 famous financial cities as samples, and set up a complex evaluation system combining objective evaluation (or an objective indicator system) and subjective evaluation (questionnaire survey). The objective indicator system values international financial centers on five aspects: the financial market, growth and development, supporting industries, service levels, and the general environment, while the questionnaires collect survey subjects' opinions to allow mutual authentication with the objective indicators and provide a reference point for the weight design in the objective complex evaluation system.

In order to make sure the sample financial cities and survey subjects are chosen scientifically and reasonably, this report follows the following standards:

Standards for choosing sample financial cities: choices of experts from the financial sector; primary operating results on models; rankings of international financial centers by other institutions; regional distribution of international financial centers.

Standards for choosing survey subjects: participants of the financial sector should account for about 70 percent of the total; high-rank executives should account for 60 percent or so; regional distribution of survey subjects should be proportionate to the regional distribution of the 45 sample financial cities; number of the survey respondents should meet the requirements of statistical science.

#### 1. Importance of evaluation indicators

In the questionnaires of Xinhua-Dow Jones IFCD, survey respondents gave grades on how important in their opinion each of the five indicators (the financial market, growth and development, supporting industries, service level and general environment) is to the evaluation of the competitiveness of financial centers. One point means "not important," and five points means "very important." This research calculates and compares the complex grades on the importance of the five aspects in 2,073 valid samples in a comprehensive evaluation way. Complex grade of element

"*i*" is expressed as  $x_i = \sum_{j=1}^{5} j \times f_{ij}$ , and  $f_{ij}$  indicates the proportion of grade "*j*" in all

th	e	grad	les	for	el	lement		ï	•	
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	Su	pport, Se	rvice, Gei	neral Env	rironmen	t	
	1 Point	2 Points	3 Points	4 Points	5 Points	Comprehensive Scores	Rank
Financial Market	7.04	7.81	17.73	30.47	36.94	3.82	1
General Environment	12.54	7.37	11.82	26.14	42.13	3.78	2
Growth and Development	6.12	8.66	20.86	34.88	29.47	3.73	3
Service	7.22	11.87	16.41	32.44	32.06	3.70	4
Industrial Support	4.89	9.87	26.31	33.68	25.25	3.65	5

Table 1 Importance Comparison on Financial Market, Growth and Development, Industrial

Note: The data from the second column to the sixth column shows the proportion of each index in each score, and the unit is

percentage.

The comprehensive grades on the above five aspects indicate that in 2011, the top five are general environment, the financial market, service level, growth and development, and supporting industries - a slightly different outcome to 2010. General environment ranks before the financial market and service level is ahead of growth and development. But complex grades of the five are close to one another. The difference in grade between two adjacent aspects is within 0.1 point, and the difference between service level and the growth and development is only 0.03 of a point. But the importance of supporting industries is apparently lower than these, which demonstrates that the general environment, the financial market, service levels, and innovative development are relatively very important in the evaluation of the competitiveness of financial centers. Comparatively, the importance of the supporting industries is relatively weaker, although it is commonly taken as an important factor.

#### 2. Comprehensive evaluation of international financial centers

The above analysis and calculation give the relative weights of the five aspects' importance to the evaluation of international financial centers. This is followed by comprehensive weighting on the objective indicators and information from subjective questionnaires according to the five aspects' respective weights, so we get a comprehensive evaluation result on the competitiveness of the 45 international financial centers. (See Chart 1)

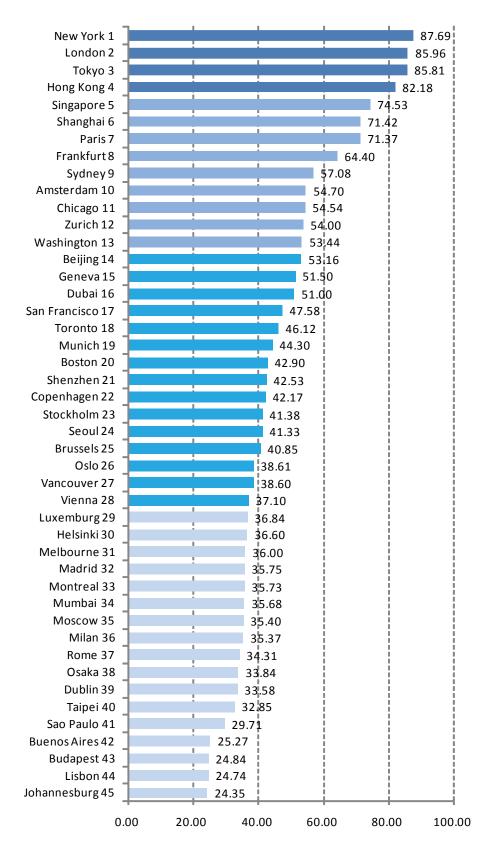


Chart 1 The General Ranking of IFCD Index

۵ty	Fi nanci al	Market	Growt Evel o	hand pnent	l ndus Supj		Ser	vi ce		eral onment	I FOD	Rank	Change in Rank	ABS(Change in
	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010		Rank)
New York	1	2	4	4	1	1	1	2	2	1	1	1	0	0
London	2	1	7	6	3	3	2	1	1	2	2	2	0	0
Tokyo	3	3	3	5	2	2	3	3	3	3	3	3	0	0
Hong Kong	4	4	2	2	4	4	4	5	4	4	4	4	0	0
Singapore	8	8	5	7	5	5	6 7	6 19	6 19	7 21	5	6 8	1 2	1
Shanghai	5	5	-	9	7	6	5	4	19 5	5	7	5	-2	2
Paris Frankfurt	6	о 6	14 12	9	8	8	5 8	4	э 8	5 10	8	5 7	-2	2
Sydney	12	13	12	11	12	13	11	10	9	8	9	10	-1	1
Amsterdam	12	20	13	12	12	15	13	10	9 7	11	10	10	5	1
Chicago	10	12	17	15	10	15	13	13	13	13	10	13	1	5
Zurich	10	9	23	14	17	11	14	7	13	9	12	12	-1	1
Washington	13	10	23	13	14	14	10	8	12	6	12	9	-4	
Beijing	9	10	6	3	9	9	34	30	30	31	13	13	-4	4
Geneva	9 14	11	24	24	9 18	9 18	- 34 9	9	10	12	14	15	-1	1
Dubai	14	14	8	8	10	10	18	17	29	25	15	10	-2	1
San Francisco		19	18	17	19	16	16	14	16	14	10	14	0	
Toronto	21	13	26	23	20	17	15	16	15	15	18	18	0	0
Munich	22	22	20	25	20	20	20	24	20	24	19	21	2	
Boston	17	17	22	23	21	19	20	24	26	17	20	19	-1	2
Shenzhen	19	16	10	10	15	39	35	39	35	27	20	22	1	1
Copenhagen	27	31	39	32	28	27	17	15	14	16	22	20	-2	2
Stockholm	35	26	32	39	20	25	19	21	17	20	23	25	2	2
Seoul	26	33	9	18	16	21	36	36	34	41	24	31	7	7
Brussels	23	21	29	29	25	22	24	25	22	19	25	23	-2	2
0slo	34	27	45	45	32	33	21	27	18	26	26	29	3	3
Vancouver	39	35	36	34	29	24	25	18	21	18	27	24	-3	3
Vienna	37	39	43	33	37	41	23	22	23	23	28	27	-1	1
Luxemburg	28	24	33	31	34	23	27	28	28	30	29	26	-3	3
Helsinki	41	41	35	38	39	31	26	23	25	22	30	28	-2	2
Melbourne	33	36	38	40	30	28	30	29	27	29	31	30	-1	1
Madrid	30	30	28	27	33	37	28	32	31	32	32	32	0	0
Montreal	38	32	41	43	35	36	33	33	24	28	33	33	0	õ
Mumbai	20	25	11	21	40	29	38	43	39	42	34	40	6	6
Moscow	24	23	15	16	23	30	39	37	42	38	35	35	0	Ő
Milan	25	28	25	28	24	32	31	31	38	35	36	36	0	õ
Rome	36	40	30	30	31	38	29	26	36	34	37	34	-3	3
0saka	32	38	37	36	26	26	37	34	33	36	38	38	0	Ő
Dublin	31	29	40	35	36	35	32	35	32	33	39	37	-2	2
Taipei	29	34	20	26	38	34	40	38	37	39	40	41	1	1
Sao Paulo	40	37	16	20	41	40	45	40	43	37	41	39	-2	2
Buenos Aires	42	43	34	37	42	42	44	41	44	44	42	42	0	0
Budapest	45	45	44	41	43	44	41	42	41	40	43	43	0	0
Lisbon	43	42	42	42	45	43	43	44	40	43	44	44	0	0
Johannesburg	44	44	31	44	44	45	42	45	45	45	45	45	0	0

#### Table 2 Ranking Comparison of IFCDIndex

Note: Different colors filled in the column of ABS (Change in Rank) represent position change volatility of respective financial centers during the past 2 years. Blue indicates stable, red indicates relatively stable, green indicates significantly changed and grey indicates extraordinarily changed.

Table 3 Analysis of Categorization Based on Position Difference of IFCD Index

Categorization	Frequenc	Proportion	Definition	Remark: Colors used in Table 2
Stable	15	33.33%	ABS (Change in Rank)=0	
Relative Stable	22	48.90%	0< ABS (Change in Rank)<3	
Significantly Changed	5	11.1%	3≤ABS (Change in Rank)<5	
Extraordinarily	3	6.7%	ABS (Change in Rank)≥5	

Note: Frequency is number of times of data occurring within prescribed ranges. ABS(change in rank) means the absolute value of change in rank.

The characteristics presented in a comprehensive comparison of development abilities of the 45 international financial centers in 2011 are as follows:

First, compared with 2010, the fluctuation is moderate and majority of the international financial centers have their rankings remain relatively stable, according to the analysis of categorization based on absolute value of position difference by the research group. The number of stable financial centers accounts for 82.23 percent of the total. The growth base factor and the difference in development speed are major

factors contributing to the change of ranks. For example, Shanghai and Mumbai move forward two and six ranks respectively in 2011 and represent growing cities. Seoul, the capital of South Korea, which displayed relatively strong growth momentum in the recovery after the financial crisis, has also advanced seven places in the rankings. However, for the cities that are relatively mature but show less obvious characteristics of an international financial center, their ranks have dropped due to a general rank rise of the emerging economies. For instance, the positions of Luxembourg and Rome of Europe and Vancouver of North America, are three lower than last year.

Secondly, the top 10 cities among the 45 international financial centers have formed a relatively balanced structure in geographical distribution. New York and London rank the top two and take an absolute dominant position among the international financial centers. Their abilities in optimizing and allocating financial factors across the globe have not been affected substantially during this round of financial crisis. Tokyo, Hong Kong, and Singapore, the top three international financial centers in Asia, rank third, fourth and fifth respectively. As representatives of mature financial centers in Asia, they preliminarily form a counterbalanced structure with the Europe and the US.

In addition, other traditional international financial centers in Europe such as Paris and Frankfurt are relatively mature. On the other hand, BRICS international financial centers, the representatives of new emerging economic bodies, are rising rapidly. Shanghai of China moves forward two, to sixth place in 2011. This shows strong growth momentum while displaying stability – a necessary condition for a mature financial center, which indicates that there were more financial factors flowing to the city in the past year, giving it greater confidence to compete with financial centers of the Europe and the US in the future.

Thirdly, some cities with weaker finance functions are now ranked more realistically. For example, Washington of the US and Beijing of China gain high recognition across the globe but lay more emphasis on their political and cultural functions than finance functions in the cities' strategic positioning though their financial markets and systems are also advanced. Therefore, the two cities' ranks drop moderately this year to the 13<sup>th</sup> and 14<sup>th</sup> respectively in terms of indictors that reflect a comprehensive assessment based on objective data calculation and subjective judgment.

Fourthly, the 45 financial development centers categorized by competitiveness and development abilities as international financial centers has remained stable and really reflects four development stages of the international financial center.

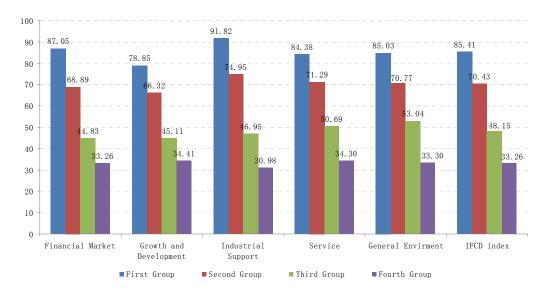






Chart 3 The Ranking of IFCD Index in Europe



Chart 4 The Ranking of IFCD Index in the Americas



Chart 5 The Ranking of IFCD Index in Asia-Pacific and Africa

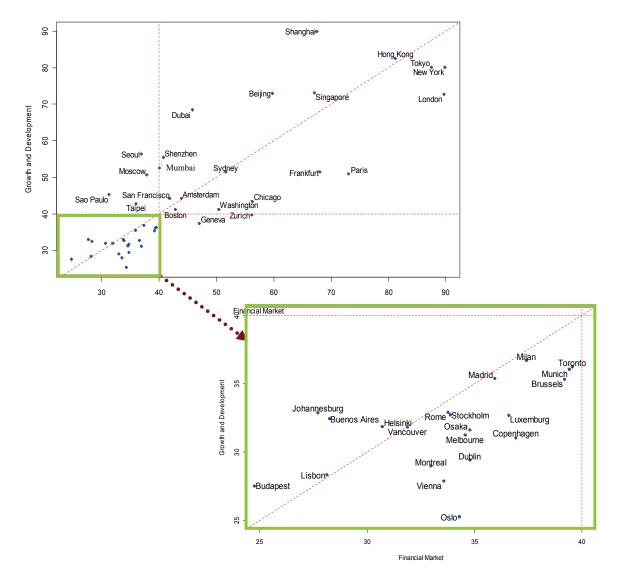


Chart 6 BCG Matrix of financial market and growth vs. development, IFCD Index

The first group includes New York, London, Tokyo and Hong Kong, each having a grade of over 80 points, which can be called mature financial centers. The four cities are global top financial centers and have apparent advantages in all the aspects that supplement and promote each other, with a free and convenient flow of financial factors. They have completed supporting infrastructures, talents supply, and policy systems. The most prominent characteristic of these cities is that they have completed the basic industrialization and urbanization process and now show absolute advantages in the service industry, with the financial service sector as the mainstay industry of the macro-economy.

The second group includes Singapore, Shanghai, Paris and Frankfurt, each with an evaluation between 60 and 80 points. This group has a structure with the co-existing elements of "maturity, relative maturity, and emerging", showing a strong growth momentum while maintaining stable development. Although there are definite gaps between this group and the top four cities, they are strong competitors of and candidates for the first group and in the long run have great potential to replace some members of the first group with their firm structure and significant rising margins, because the stability and progress of an international financial center not only depends on reserves but also on the increase of financial factors.

The third group includes 17 cities, each with a mark of between 40 and 60 points. They fit into the definition of a comprehensive financial center proposed in the report on the Xinhua-Dow Jones International Financial Centers Development Index-2010. A common trend among the 17 cities is that their development is mainly supported by relatively strong general environment and service level. They play the comprehensive roles of political, economic, cultural, and social centers. These cities have a relatively small potential to develop into global financial centers as their stable structure will restrict flow of financial factors and make the factors hard to achieve effective regrouping and optimized distribution. But it is also possible that some emerging cities have the potential to develop rapidly.

The fourth group includes 20 cities that are each graded below 40 points. In the analysis of absolute position difference, this group's stability is similar to the first group although it has a lower ranking. This indicates that once the absolute difference is established, it is very difficult to change status, because to a large extent, the group's development problems originate from the cities' weak economic foundations. However, some cities of the BRICS in the group are developing rapidly. Their infrastructure and supporting service facilities are expected to develop significantly in the coming several years. These cities have some potential to overtake other traditional financial centers and are on their way to becoming international financial centers.

To demonstrate more vividly the relationship between the development level and growth of international financial centers, the BCG Matrix is used to divide the financial centers into four areas.

The first is the prosperous area, or the first quadrant in the above chart (up right). Financial centers within this area including Beijing, Shanghai, Hong Kong, and Singapore possess large-size financial markets and strong growth momentum. Compared to last year, Beijing, Shanghai, and Hong Kong's locations above the diagonal line have moved up and this reflects a rise in their innovative abilities.

The second is the mature area, or the fourth quadrant in the above chart (down right). Financial centers within this area are characterized by a concentration of traditional financial centers and strong interaction and replacement activity with those in the first and fourth quadrants. This year, only Geneva and Zurich are in this area while Brussels and Toronto are removed to the starting area.

The third is the emerging area, or the second quadrant in the above chart (left up). This area, a successor of the third area, is a concentration of emerging economies such as Mumbai, Seoul, St. Paul, Moscow, and Shenzhen. These cities have strong innovative abilities and growth momentum despite not being large.

The fourth is the starting area, or the third quadrant in the above chart (left down or the magnified quadrant in the above chart), which can also be called the area of small financial centers. Cities in this area are not international financial centers in a strict sense. They have the great variety that characterizes small size. Some are only just beginning to develop as international financial centers.

#### (II) Analysis of development indicators of international financial

#### centers

Comparative analysis on the evaluation result of primary indicators and their respective indicators can lead to better understanding of the competition and development of international financial centers.

#### 1. Financial Market

The indicator of Financial Market has four indicators, i.e. the capital market, the forex market, the banking market, and the insurance market. Synthesizing the evaluation results on the four sub-elements of the 45 international financial centers, we get the ranking of their power in financial market development.

The year of 2011 witnesses the following features in the view of financial market index assessment:

First, the general structure of financial market sub-elements is similar to that of the evaluation and analysis of the comprehensive quality of international financial centers. The financial market is the core module that composes a financial center, as its degree of development is crucial to the ranking of a financial center.

Secondly, financial centers at the top of ranking list concerning financial market sub-elements are still the main forces of world finance. Financial markets in these areas have gained long-term accumulated advantages and other financial centers cannot pose a threat to them in the short term.

Thirdly, in the evaluation of the sub-elements of the financial market, index value grades are still widely scattered, with the difference between the highest and the lowest 65.1 points, 0.9 points less than last year, but still high.

Fourthly, sub-elements of the financial market in major financial centers in the Asia-Pacific region on the whole have seen greater volatility. Beijing, Sydney, Mumbai, Seoul, Chinese Taipei, and Osaka all move up in the ranking list, with Mumbai moving up five places and Seoul up seven places.

Fifthly, for some international financial centers with well-developed utilizations, such as Washington D.C, Copenhagen, Dublin and Lisbon, who have witnessed position dips in this year, are mostly due to these cities' change of functional orientation, in which financial development is squeezed by expansion of other industries with higher weight in the overall city development strategy.

Sixthly, according to the evaluation of the 45 international financial centers, the scores system groups the cities into four tiers, with first-tier cities having the most points. There are four cities in the first tier, nine in the second tier, 15 in the third tier, and 17 in the fourth tier. The second tier has two more cities added and the third tier, four more cities.

۵ty	Fina Mar		Change in	ABS(Change in	NewYork1 London2				!	89
uty	2011	2010	Rank	Rank)	Tokyo 3		1 1		1	87.4
New York	1	2	1	1	Hong Kong 4		!!!		!	81.22
London	2	1	-1	1	Paris5		i i		7	3,02
Tokyo	3	3	0	0	Frankfurt6		: :		68.00	1
Hong Kong	4	4	0	0	Shanghai 7		i i		67.50	1
Paris	5	5	0	0	Singapore8		: :		67.06	1
Frankfurt	6	6	0	0			i i		59.78	
Shanghai	7	7	0	0	Beijing9		: :	-	!	
Singapore	8	8	0	0	Chicago 10		i i		6.23	
Beijing	9	11	2	2	Zurich11		: :		6.19	
Chicago	10	12	2	2	Sydney 12		i i	51.5	1	i
Zurich	11	9	-2	2	Washington 13		!!!	50.4	!	
Sydney	12	13	1	1	Geneva14		i i	46.98	• 	
Washington	12	10	-3	3	Dubai 15		!!!	45.86	1	
Geneva	14	14	0	0	Amsterdam16		1 1	43.92	1 1 1	
Dubai	15	15	0	0	Boston 17		, ,	42.82	 	i
Amsterdam	16	20	4	4	San Francisco 18			41.82	8	
Boston	10	17	т 0	0	Shenzhen 19			40.74	• 	
an Francisco	18	19	1	1	Mumbai 20			40.06	1	
Shenzhen	19	15	-3	3	Toronto 21			39.54	1 1 1	
Mumbai	20	25	5	5	Munich22			39.40	 	i
Toronto	20 21	20 18	-3	3	Brussels 23			39.18	8	
Munich	21 22	22	-3	0	Mbscow24			37.84	• 	
Brussels	22 23	22	-2	2	Milan 25		I I	37.40	1	
					Seoul 26		: :	36.93	1	
Moscow	24	23	-1	1	Copenhagen 27		I I	36.91	 	i
Milan	25 26	28	3	3	Luxemburg28			36.59	1	
Seoul		33	7	7	Taipei 29			5.97	1 	
Copenhagen	27	31	4	4	Madrid 30		: :	5.94	1	
Luxemburg	28	24	-4	4	Dublin 31		<u> </u>		   	
Taipei	29	34	5	5	Osaka 32		: :	1.78 • <del></del>	 	i
Madrid	30	30	0	0			<u> </u>	1.77 	1	
Dublin	31	29	-2	2	Melbourne 33		! !	1.55	1 	
0saka	32	38	6	6	Oslo34		<u> </u>	.29	1	
Melbourne	33	36	3	3	Stockholm35		: :	.86	1   	
Oslo	34	27	-7	7	Rome 36		I I	.76		i I
Stockholm	35	26	-9	9	Vienna 37		33	.55	8	
Rome	36	40	4	4	Montreal 38		32			
Vienna	37	39	2	2	Vancouver 39		31.8			1
Montreal	38	32	-6	6	Sao Paulo 40		31.3	32	I I I	
Vancouver	39	35	-4	4	Helsinki 41		30.7	0	i I	i
Sao Paulo	40	37	-3	3	Buenos Aires 42		28.25		1	
Helsinki	41	41	0	0	Lisbon43		28.12		1   	
Buenos Aires	42	43	1	1	Johannesburg44	]	27.70		 	i I
Lisbon	43	42	-1	1	Budapest 45	]	24.74		1	
Johannesburg	44	44	0	0		i	i i		1	
Budapest	45	45	0	0	0.	00 20.	.00 40.	00 60.	.00 80	).00 1

Chart 7 The Financial Market Ranking of IFCD Index

#### 2. Growth and Development

The Growth and Development index contains four sub-elements, i.e. capital market growth, economic growth, city innovation output, and creation potential. Synthesizing the evaluation results on the four sub-elements of the 45 international financial centers, we get the ranking of their importance in growth and development.

The Growth and Development index assessment in 2011 shows the following features:

First, the top 10 financial markets include those in developed countries such as New York, London, and fast-growing markets in the Asia-Pacific region, which fully reflect the growth.

Secondly, index value grades of the 45 cities' growth and development are more scattered than last year, with the range between the highest and the lowest 64.6 points, 4.6 points higher year on year.

Thirdly, Shanghai still tops the list of growth capabilities. Its stable development level contributes the rise in comprehensive ranking.

Fourthly, emerging economies bring out their late-development advantages. Moscow, Sao Paulo, Budapest and Johannesburg have all moved up in the rankings, with Johannesburg climbing 13 places.

Fifthly, some international financial centers with comprehensive city functions see significant ranking adjustment, as their function orientation and development of financial market elements are crowded out by the development of other elements. For instance, Washington, Copenhagen, Dublin and Lisbon have suffered big declines in ranking.

Sixthly, according to the evaluation of the 45 international financial centers, the scores system groups the cities into four tiers, with first tier cities having the most points. There are four cities in the first tier, nine in the second tier, nine in the third tier, and 23 in the fourth tier. Beijing still remains in the second tier.

۵ty	Devel	h and opment	Change i n	in	Shanghai 1 HongKong 2		89.88 82.50
01 1 1	2011	2010	Rank	Rank)	Tokyo 3		80.09
Shanghai	1	1	0	0	NewYork4		80.08
Hong Kong	2	2	0	0	Singapore5		73,03
Tokyo	3	5	2	2	Beijing6		72,95
New York	4	4	0	0	London7		72,74
Singapore	5	7	2	2	Dubai 8		68.43
Beijing	6	3	-3	3	Secul 9		56.35
London	7	6	-1	1	Shenzhen 10		55.44
Dubai	8	8	0	0	Mumbai 11	52	253
Seoul	9	18	9	9	Frankfurt 12	51.	39
Shenzhen	10	10	0	0	Sydney 13	51.	37
Mumbai	11	21	10	10	Paris 14	50.	96
Frankfurt	12	11	-1	1	Moscow15	50.	66
Sydney	13	12	-1	1	Sao Paulo 16	45.28	
Paris	14	9	-5	5	Amsterdam17	44.21	
Moscow	15	16	1	1	San Francisco 18	44.15	
Sao Paulo	16	20	4	4	Chicago 19	43.41	
Amsterdam	17	15	-2	2	Taipei 20	42.71	
San Francisco	18	17	-1	1	Washington 21	41.13	
Chicago	19	14	-5	5	Boston 22	41.08	
Taipei	20	26	6	6	Zurich23	39.69	
Washington	21	13	-8	8	Geneva24	37.32	
Boston	22	22	0	0	Mlan 25	36.71	
Zurich	23	19	-4	4	Toronto 26	36.24	
Geneva	24	24	0	0	Munich27	36.06	
Milan	25	28	3	3	Madrid 28	35.39	
Toronto	26	23	-3	3	Brussels 29	35.34	
Munich	27	25	-2	2	Rome 30	32,90	
Madrid	28	27	-1	1	Johannesburg31	32,50	
Brussels	29	29	0	0	Stockholm32	32¦74	
Rome	30	30	0	0	Luxenburg33	I I I I I I I I I I I I I I I I I I I	
Johannesburg	31	44	13	13	Buenos Aires 34	32,71	
Stockholm	32	39	7	7	Helsinki 35	I I	
Luxemburg	33	31	-2	2	Vancouver 36	31,88	
Buenos Aires	34	37	3	3	-	I I	
Helsinki	35	38	3	3	Osaka 37	31.63	
Vancouver	36	34	-2	2	Melbourne 38	31.25	
Osaka	37	36	-1	1	Copenhagen 39	31.04	
Melbourne	38	40	2	2	Dublin40	29.41	
Copenhagen	39	32	-7	7	Montreal 41	28.98	
Dublin	40	35	-5	5	Lisbon42	28.33	
Montreal	41	43	2	2	Vienna 43	27.87	
Lisbon	42	42	0	0	Buckapest 44	27.50	
Vienna	43	33	-10	10	Oslo45	25.28	
					000	2000 4000 00	).00 80.00 100.
Budapest Oslo	44 45	41 45	-3 0	3 0	0.00	20.00 40.00 60	0.00 80.00 1

Chart 8 The Growth and Development Ranking of IFCD Index

#### 3. Industrial Support

The indicator of Industrial Support has three indicators, including business environment support, basic city conditions, and city infrastructure. The index assesses all the three elements to evaluate the industrial support capability of the 45 international financial centers.

The 2011 industrial support index assessments demonstrate the following features:

First, it shows polarization between stability and volatility. The top 10 financial centers have remained stable in the ranking list of industrial support, which is similar to that of last year.

Secondly, according to the assessment results, the 45 international financial centers still differentiate a lot by index value, with a score difference up to 73.39 points, indicating the gap of industrial support dramatically influences the development of financial centers. Infrastructure and the development of related industries become importance references of the development of financial centers. Financial centers in developed countries ranking the top in industrial support have strong allocation ability.

Thirdly, slow growth in industrial support affects emerging economies except Moscow, which is a soft spot, but leaves room for future development.

Fourthly, according to the evaluation of the 45 international financial centers, the scores system groups the cities into four tiers, with first tier cities having the most points. There are four cities in the first tier, nine in the second tier, 15 in the third tier, and 17 in the fourth tier. The second tier has three more cities added.

۵ty	Supp	port	in	ABS(Change in	Tokyo 2	99
	2011	2010	Rank	Rank)	London3	92
New York	1	1	0	0	HongKong4	86.91
Tokyo	2	2	0	0	Singapore 5	79.55
London	3	3	0	0	Shanghai 6	78.12
Hong Kong	4	4	0	0	Paris7	75.70
Singapore	5	5	0	0	Frankfurt8	66.44
Shanghai	6	7	1	1	Beijing9	60.95
Paris	7	6	-1	1	Chicago 10	55.20
Frankfurt	8	8	0	0	Dubai 11	55.18
Beijing	9	9	0	0	Sydney 12	55.08
Chicago	10	11	1	1		
Dubai	11	10	-1	1	Amsterdam13	51.25
Sydney	12	13	1	1	Washington 14	50.72
Amsterdam	13	15	2	2	Shenzhen15	49.40
Washington	14	12	-2	2	Secul 16	48.06
Shenzhen	15	39	24	24	Zurich17	47.24
Seoul	16	21	5	5	Geneva18	44.84
Zurich	17	14	-3	3	San Francisco 19	44.11
Geneva	18	18	0	0	Toronto 20	43.84
San Francisco	19	16	-3	3	Munich21	43.40
Toronto	20	17	-3	3	Boston 22	41.47
Munich	21	20	-1	1	Moscow23	39.20
Boston	22	19	-3	3	Milan 24	37.56
Moscow	23	30	7	7	Brussels 25	36.20
Milan	24	32	8	8	Osaka 26	35.96
Brussels	25	22	-3	3	Stockholm27	35.95
Osaka	26	26	0	0	Copenhagen28	35.34
Stockholm	20	25	-2	2	Vancouver 29	33.56
Copenhagen	28	25	-1	1	Melbourne 30	33.50
Vancouver	20	24	-5	5	Rome 31	32/81
Melbourne	30	24	-2	2	Oslo32	32/65
Rome	31	38	7	7	Madrid 33	32,52
0slo	32	33	1	1	Luxenburg34	3239
Madrid	33	37	4	4	Montreal 35	32,39
Luxemburg	34	23	-11	11	Dublin36	31.67
Montreal	34 35	23 36	-11	1	Vienna 37	31.65
Dublin	36	30 35	-1	1	Taipei 38	31.27
Vienna	30 37	55 41	-1		Helsinki 39	
Taipei	37 38	41 34	4	4	-	30.53
Helsinki			-4	4	Mumbai 40	30.46
Helsinki Mumbai	39	31		8	SaoPaulo41	29.29
	40	29 40	-11	11	Buenos Aires 42	24.50
Sao Paulo	41	40	-1	1	Buckapest 43	23.45
Buenos Aires	42	42	0	0	Johannesburg44	23.19
Budapest Johannesburg	43	44	1	1	Lisbon45	21.00
Inhannochurg	44	45	1	1	-	· · ·

Chart 9 The Industrial Support Ranking of IFCD Index

#### 4. Service

The index of service has three elements, including government services, intellectual capital, and urban environment. The index assesses all the three elements to evaluate the service level of the 45 international financial centers.

The 2011 service index assessments show the following features:

First, traditional European and American financial centers show general advantages. Ranging from developed world financial centers to small-scale regional financial centers, traditional western financial centers all received generally high assessment results. For instance, Paris is ranked fifth and Geneva ranked ninth. Many international organizations are headquartered in Geneva, because of its high level of service. The urban environment and government actions are of great importance to the improvement of service levels.

Secondly, the financial centers in emerging economies generally scored low in service levels. For example, Shanghai ranks seventh in service, which is far behind Shanghai's ranking in other elements. Beijing, Shenzhen, Seoul, Osaka, Mumbai, Moscow, Budapest, Johannesburg, Buenos Aires, Sao Paulo, and some others received scores that put them toward the bottom of the ranking. The service levels of these cities all face immense challenges in the days ahead, especially in the area of government service where they need to respect and adapt to the rules of the market economy. There is room for countries in the Asia-Pacific region to make general improvement of government administration and service capability.

Thirdly, compared to capital city's financial centers in emerging economies, Washington DC's level of service is higher and raises its place in the comprehensive ranking.

Fourthly, the service level index value of the assessed cities runs stable with low volatility, indicating it is hard to see an improvement or decline of service levels in the short term. To promote service levels, long-term strategic investment and construction are required.

Fifthly, index value grades of the 45 cities' service levels in 2011 are less scattered than last year, with the range between the highest and the lowest at 65.38 points, 6.22 points lower year on year.

Sixthly, according to the evaluation of the 45 international financial centers, the scores system groups the cities into four tiers, with first-tier cities having the most points. There are four cities in the first tier, nine in the second tier, 15 in the third tier, and 17 in the fourth tier. The fourth tier cities are mostly cities in the Asia-Pacific region. In addition, four European cities are listed on the top of the fourth tier that also includes Johannesburg in South Africa and Buenos Aires in South America.

۵ty	Serv	vi ce	Change in	ABS(Change in	New York 1 London 2							!	86.95 86.78
۵.,	2011	2010	Rank	Rank)	Tokyo 3		1		1	1		1	85.95
New York	1	2	1	1	Hong Kong 4				!			77.8	
London	2	1	-1	1	Paris5		i		i .	i		77.04	
Tokyo	3	3	0	0	Singapore 6		1		!			4.87	Ŧ
Hong Kong	4	5	1	1	Shanghai 7		i		i	i	68.40	1	
Paris	5	4	-1	1	Frankfurt8		1		!		64.84	1	
Singapore	6	6	0	0	Geneva9		- i		i	i	63.61	ļ	
Shanghai	7	19	12	12	Zurich 10		-!		!	!	62.67	i	
Frankfurt	8	11	3	3	Sydney 11		i		i	- i	62.59		
Geneva	9	9	0	0			1		!			i	
Zurich	10	7	-3	3	Washington 12		i		i	i	62.02	!	
Sydney	11	10	-1	1	Amsterdam13		1		!		61.17		
Washington	12	8	-4	4	Chicago 14		i		i	- I	5.29	ļ	
Amsterdam	13	13	0	0	Toronto 15					53		ļ	
Chicago	14	12	-2	2	San Francisco 16		- 1		1	51.8		i	
Toronto	15	16	1	1	Copenhagen 17				!	9.18			
San Francisco	16	14	-2	2	Dubai 18		- 1		1	9.05		i	
Copenhagen	17	15	-2	2	Stockholm19		!			8.76			
Dubai	18	17	-1	1	Munich20		1		1	8.73		i	
Stockholm	19	21	2	2	Oslo21		!		46	.13		i I	
Munich	20	24	4	4	Boston 22				45.	44 ¦		ļ	
Oslo	21	27	6	6	Vienna 23				44.4	19 į		i I	
Boston	22	20	-2	2	Brussels 24				44.0	)5 ¦			
Vienna	23	22	-1	1	Vancouver 25		-		43.8	4 İ		i	
Brussels	24	25	1	1	Helsinki 26				42.53	3			
Vancouver	25	18	-7	7	Luxemburg27				42.19	)			
Helsinki	26	23	-3	3	Madrid 28				39.54			!	
Luxemburg	27	28	1	1	Rome 29		1		39.40			ļ	
Madrid	28	32	4	4	Melbourne 30		÷		39.19	i		i i	
Rome	29	26	-3	3	Mlan 31				38.07				
Melbourne	30	29	-1	1	Dublin32		:		36.94	i		i	
Milan	31	31	0	0	Montreal 33				1 36.88				
Dublin	32	35	3	3	Beijing34				36.87	i		i	
Montreal	33	33	0	0	Shenzhen 35			3	4.48				
Beijing	34	30	-4	4	Seoul 36		!		.67	į		i	
Shenzhen	35	39	4	4	Osaka 37		1	32	.08	ļ		ļ	
Seoul	36	36	0	0	Mumbai 38		!	31.					
Osaka	37	34	-3	3	Mbscow 39		1	28.06	1	i		i !	
Mumbai	38	43	5	5	Taipei 40		!	26.53	1				
Moscow	39	37	-2	2	Buckapest 41		1	25.99	1	i		i	
Taipei	40	38	-2	2	Johannesburg42		1	24.84	1				
Budapest	41	42	1	1	Lisbon 43		1	23.26	:   	ļ		i	
Johannesburg	42	45	3	3	Buenos Aires 44			23.20 22.99	1	i		1	
Lisbon	43	44	1	1	Sao Paulo 45		1						
Buenos Aires	44	41	-3	3	Jau raulu 43			21.57				Í –	
Sao Paulo	45	40	-5	5	0.0	00 2	20.00	40	0.00	60.0	00 80	.00	10

Chart 10 The Service Ranking of IFCD Index

#### 5. General Environment

The indicator of general environment is composed of three sub-elements, including the economic environment, political environment, and openness. The index assesses all these three elements to evaluate the general environment of the 45 international financial centers.

The 2011 general environment index assessments demonstrate the following features:

First, this year's index value volatility is low, with the index value's absolute difference of five to 10 points (including five, not including 10) occurring six times and involving only 13.3 percent of the 45 cities. The global economic recovery is quite complicated in the post-financial crisis era. Long-term efforts are needed to tackle problems such as governance mechanisms and economic structure thanks to the different political and economic systems of countries. Therefore, the general environment sees only moderate fluctuation.

Secondly, the performance of emerging economies has been relatively behind that of other countries, but they have a strong development momentum. These cities are expected to rise up in rankings, as the cooperation between emerging economies, especially those of the BRICS countries, is growing and deepening.

Thirdly, Chinese cities enjoy general improvement in the ranking of general environment. Compared to 2010, Hong Kong's ranking has stayed the same, while Beijing moves up one rank, and Shanghai moves up two ranks, showing China's economic growth and opening to the outside world has made an absolute contribution to the world economy. China's GDP is estimated to be roughly 10 percent of the world's GDP. Steady economic growth for Chinese cities is beneficial for their move towards becoming international financial centers.

Fourthly, index value grades of the 45 cities' general environment in 2011 are less scattered than last year, with the range between the highest and the lowest at 64.3 points, 4.4 points lower than last year, indicating the world is on course to re-balance its economy, politics, and openness. The more it is unbalanced, the worse it is for the sustainable development of economies. Therefore, the general environment reflects greater balance among economies on strengthening cooperation and mutual benefit.

Fifthly, according to the evaluation of the 45 international financial centers, the scores system groups the cities into four tiers, with first-tier cities having the most points. The first tier has four cities scoring more than 80 points, an increase from last year's number of first-tier cities. Meanwhile, their comprehensive capability gets improved. The second tier has nine cities, the third tier 15 cities, and the fourth tier 27 cities.

۵ty	Gene Enviro		Change in	ABS(Change in	London1 NewYork2		!	!				87.69 87.27
	2011	2010	Rank	Rank)	Tokyo3		1	1	- 1		1	.63
London	1	2	1	1	HongKong4		!	!	!			.54
New York	2	1	-1	1	Paris5		i	1	i		79.8	
Tokyo	3	3	0	0	Singapore6		1	-	- !		78.23	
Hong Kong	4	4	0	0	Amsterdam7		i.	i	i	7	2,48	)
Paris	5	5	0	0	Frankfurt8		1	- 1	- !		2,40 .06	
Singapore	6	7	1	1	-		i	i	i	64.59	.00	
Amsterdam	7	11	4	4	Sydney9 Geneva10		1		!		i	
Frankfurt	8	10	2	2	-		i	i	i	64.25	1	
Sydney	9	8	-1	1	Zurich11		1	1	!	63.70		
Geneva	10	12	2	2	Washington 12		i	i	i	62.58		
Zurich	11	9	-2	2	Chicago 13		1	1	;	62.28		
Washington	12	6	-6	6	Copenhagen14		i	i		57.83	i -	
Chicago	13	13	0	0	Toronto 15		:	!		57.37		
Copenhagen	14	16	2	2	San Francisco 16		1	1	1	5.73	1	
Toronto	15	15	0	0	Stockholm17		1			5.14		
San Francisco	16	14	-2	2	Oslo 18				54	.11		
Stockholm	17	20	3	3	Shanghai 19		1		53.	95	i	
0slo	18	26	8	8	Munich20				53.	66		
Shanghai	19	21	2	2	Vancouver 21				51.\$	0	i	
Munich	20	24	4	4	Brussels 22			4	19.12		1	
Vancouver	21	18	-3	3	Vienna 23		1	4	7.52			
Brussels	22	19	-3	3	Montreal 24			4	7.06			
Vienna	23	23	0	0	Helsinki 25			4	7.02			
Montreal	24	28	4	4	Boston 26		÷	43.6	54 İ		i	
Helsinki	25	22	-3	3	Melbourne 27		1	41.31	L		1	
Boston	26	17	-9	9	Luxenburg28			40.11			1	
Melbourne	27	29	2	2	Dubai 29		1	37.12			1	
Luxemburg	28	30	2	2	Beijing30		1	35.92				
Dubai	29	25	-4	4	Madrid 31		1	35.30	i		i	
Beijing	30	31	1	1	Dublin32		!	34.96				
Madrid	31	32	1	1	Osaka 33		1	34.76	i		i	
Dublin	32	33	1	1	Secul 34		1	33,15				
Osaka	33	36	3	3	Shenzhen 35		1	33,09	i		i	
Seoul	34	41	7	7	Rome 36		1	32,69			-	
Shenzhen	35	27	-8	8	Taipei 37		' <del>2</del>	1				
Rome	36	34	-2	2	Mlan 38			7.90  7.33	i			
Taipei	37	39	2	2	Mumbai 39							
Milan	38	35	-3	3	Lisbon40		24.1		i		i	
Mumbai	39	42	3	3	-		22.9	- I				
Lisbon	40	43	3	3	Buckapest 41		22.56				i	
Budapest	41	40	-1	1	Moscow42		21.72	1	ļ			
Moscow	42	38	-4	4	Sao Paulo 43		21.40					
Sao Paulo	43	37	-6	6	Buenos Aires 44		18.37		į		Ì	
Buenos Aires	44	44	0	0	Johannesburg45	1	13.39					
Ducinos HIIES	11	11	0	0								

Chart 11 The General Environment Ranking of IFCD Index

### II. Geographic Distribution of Global Financial centers

We list 45 international financial centers based on the development index. Table 4 shows the geographic distribution of these financial centers around the world. According to the table, Europe has the biggest number of financial centers, followed by the Asia-Pacific region and Africa. America has 10 cities listed here, with eight coming from North America.

#### (I) A general survey of financial centers on the five continents

Table 4 Global Distribution of the Cities Evaluated						
	Number of the Cities Evaluated	Top Ten Cities				
America	10	New York(1)				
Europe	21	London(2), Paris(7), Frankfurt(8), Amsterdam(10)				
Asia-Pacific and Africa	14	Tokyo(3), Hong Kong(4), Singapore(5), Shanghai(6), Sydney(9)				

#### 1. Analysis of comprehensive competitiveness

Among the top 10 cities, five come from the Asia-Pacific region with improved general rankings. For instance, the rankings of Singapore, Shanghai, and Sydney have risen by one, two, and one, respectively, showing their rapid development momentum. Despite the fact that New York takes the lead in the ranking, not many financial centers are based in America. Besides, Washington, which ranked the 9th in 2010, is not in the top 10 for 2011. This phenomenon is related to the concentration effect along with the development of global financial centers. Small centers are being incorporated into a larger one to strengthen the latter's functions. Furthermore, with the thriving of the financial centers in the Asia-Pacific region, the ranking decline of Paris and Frankfurt, which went down by two and one place respectively, is seen as irreversible. Amsterdam ranks the 10th for its excellent financial service plus a stable and favourable environment -- a revival of its historical financial strength on the European continent.

#### 2. Analysis of elements of competitiveness

Table 5 Distribution of Top Ten Cities in Financial Market

Area	Financial Market
America	New York(1), Chicago(10)
Europe	London(2),Paris(5),Frankfurt(6)
Asia-Pacific and Africa	Tokyo(3),Hong Kong(4),Shanghai(7),Singapore(8), Beijing(9)

Table	e 6 Distribution of Top Ten Cities in Growth and Development					
Area	Growth and Development					
America	New York(4)					
Europe	London(7)					
Asia-Pacific and Africa	Shanghai(1),Hong Kong(2), Tokyo(3),Singapore(5), Beijing(6),Dubai(8),Seoul(9) Shenzhen(10)					
Т	able 7 Distribution of Top Ten Cities in Industrial Support					
Area	Industrial Support					
America	New York(1), Chicago(10)					
Europe	London(3),Paris(7),Frankfurt(8)					
Asia-Pacific and Africa	Tokyo(2),Hong Kong(4),Singapore(5),Shanghai(6),Beijing(9)					
Area	Table 8 Distribution of Top Ten Cities in Service Service					
America	New York(1)					
Europe	London(2),Paris(5), Frankfurt(8), Geneva(9),Zurich(10),					
Asia-Pacific and Africa						
	Tokyo(3),Hong Kong(4),Singapore(6), Shanghai(7)					
	Tokyo(3),Hong Kong(4),Singapore(6), Shanghai(7) ble 9 Distribution of Top Ten Cities in General Environment					
Tal	ble 9 Distribution of Top Ten Cities in General Environment					
Tal Area	ble 9 Distribution of Top Ten Cities in General Environment General Environment					

#### Table 6 Distribution of Top Ten Cities in Growth and Development

The following are the features of the competition factors. First, the top-10 financial centers also score high in the five sub-indexes. Secondly, except the ranking of growth and development, New York, London, and Tokyo are in the top in the lists of all sub-elements except growth and development, indicating their leading financial position on the continents of America, Europe, and Asia-Pacific. Third, the number of financial centers in Europe and Asia-Pacific accounts for 80 to 90 percent of the top 10. Fourth, the financial centers from America and Europe have notable advantages in terms of the financial market, service level, and general environment, while late-comers form Asia-Pacific have great potential in the sub-elements such as industrial support, and growth and development. Fifth, the general rankings of Tokyo, Hong Kong, and Singapore are relatively high, demonstrating their maturity and steady progress. Shanghai, seen as a promising city in China and even in the whole world, ranks the first in the growth and development sub-element this year, highlighting its strength in this area. Sixth, many European cities other than the traditional financial centers Paris, London, and Frankfurt also show their strengths: for instance, Amsterdam and Geneva score exceptionally high in certain sub-elements.

#### (II) Financial centers in America

New York ranks the first in the international Financial Centers Development index. In 1810, New York replaced Philadelphia to become the largest financial and commercial center in America at a time when most international financial transactions were made in London. During and after the World War I, New York emerged rapidly as an international financial center. Chart 12 provides a comparison of all sub-elements of the top five American financial cities, which shows that New York ranks well ahead of the other four cities in all the five aspects. As for the financial market, New York is not only home to many major commercial banks, savings banks, investment banks, stock exchanges and insurance companies, but also the location of many foreign banks' branches. The New York Stock Exchange (NYSE) ranks first in terms of market value as well as IPO quantity; it ranks the second in terms of trading volume among all stock exchanges. Around 2800 companies choose to get listed on the NYSE, which has a global market value of 15 trillion US dollars.

The second top financial center in America is Chicago, which is an important financial center in the mid-western United States and also one of the global international centers. Chicago scores high in terms of its financial market and industrial support, both of which rank 10th place. It ranks 13th both in terms of service level and general environment, but the 19th in terms of growth and development.

In terms of the financial market, the Chicago Stock Exchange is the second largest financial trading house after the NYSE. The CME is the largest trading market of fragile goods and a prominent financial exchange in the world. The total financial assets of Chicago rank the third within Federal Reserve administrative districts.

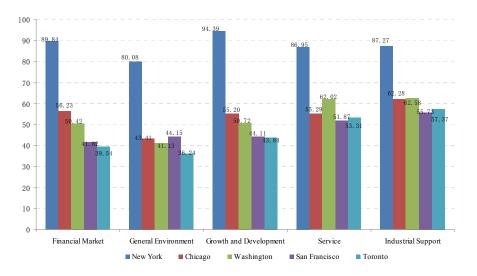


Chart 12 Indicator Scores Comparisons of the Top Five American Cities

#### (III) Financial centers in Europe

London takes the first place in Europe, ranking first in terms of general environment, second in financial market, and service level, third in industrial support, and seventh in growth and development. London is an old international financial center, also an important city in trans-national bank lending, stock exchange, international bond issuance, foreign money exchange, marine insurance, and aviation insurance markets. Approximately 31 percent of global currency transactions take place in London and the London Stock Exchange is one of the world's most important securities trading houses. As of 1991, the city of London was home to a total of more than 500 banks (of which 470 were foreign), ranking it first in terms of global metropolitans. London's annual foreign exchange turnover totals 3 trillion GBP, making it the world's largest international foreign exchange market. In addition, it is also the world's largest US dollar market in Europe. Daily turnover of the oil exporting countries in London can at times amount to more than 50 billion dollars, taking up more than one-third of the global total US dollar transaction.

London is also home to the Bank of England, the British central bank, and headquarters to 13 clearing banks, including Barclays, Lloyds, Midland, and the National Westminster Bank, plus more than 60 commercial banks. The city of London is also the world's largest international insurance center with more than 800 insurance companies, of which more than 170 are branches of foreign insurance companies. Besides this in London there are numerous commodity exchanges dealing in gold, silver, nonferrous metals, wool, rubber, coffee, cocoa, cotton, oil, wood, sugar, tea, antiques, and various other precious or staple commodities.

Paris, the French financial center, is ranked second in Europe. This is one of the most important financial centers in Europe, ranking seventh among the 45 cities. Paris is ranked fifth in terms of financial market, service, and general environment in 2011. The financial industry in France boasts a long history; its earliest banks and financial institutions dated back to before the 19<sup>th</sup> century. At present, there are over 600 financial institutions and nearly 40,000 branches, with more than 400,000 employees and a total asset of 7 trillion euros. BNP Paribas, Societe Generale, Crédit Agricole, Groupe Caisse d'epargne, Credit Mutuel and other major banks account for 93 percent of all bank assets in France.

German financial center Frankfort is ranked third in Europe. It is ranked sixth in terms of financial market, eighth in terms of service and general environment in 2011.Frankfurt is not only the symbol of the German financial industry and its highly advanced technology, but is also a hub of currency institutions in Europe. It is home to over 400 banks,770 insurance companies, and numerous commercial advertising firms. Deutsche Bundesbank, the central bank of Germany, and the Frankfort Stock Exchange, the third largest stock exchange in Europe, are on the downtown. The European Central Bank and Deutsche Boerse are also located in Frankfurt. Deutsche Boerse is one of the largest stock exchanges in the world, in which 85 percent of the country's stock trading takes place.

Dutch financial center Amsterdam is ranked fourth in Europe. It is especially strong in service level and general environment, ranking 13th in service level and 7th in general environment among the 45 cities.

The Switzerland financial center Zurich is ranked fifth in Europe. It is not only Switzerland's largest financial center, but also a prominent one in Western Europe. The city is especially strong in service levels and general environment. Being the hub of hundreds of banks where more than half of which are foreign, Zurich enjoys the title "the city of European millionaires". With a leading amount of stock exchange transactions in the Western Europe, Zurich is home to 70 percent of Western Europe's stock exchange turnover. The *Bahnhofstrasse* in Zurich is generally considered as the world's richest street. The funds mobilized from this street are above 20 percent of global annual funds.

Zurich is also one of the most important international financial centers and gold markets. The gold market of Zurich is even more world-renowned, but its global status has slipped slightly as it fell behind London in the 1960s as the world's second largest gold market.

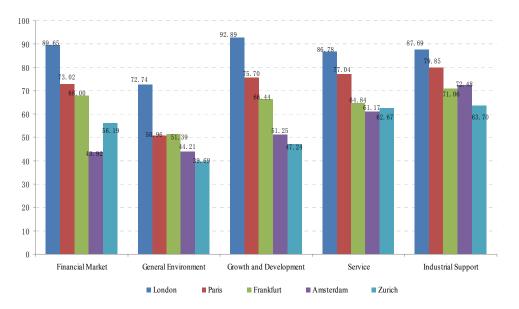


Chart 13 Indicator Scores Comparisons of the Top Five European Cities

#### (IV) Financial centers in the Asia-Pacific region

As last year, the top five financial centers in the Asia-Pacific region are still Tokyo, Hong Kong, Singapore, Shanghai, and Sydney, ranking respectively as the third, fourth, fifth, sixth, and ninth in the list of 45 cities, among which Singapore and Sydney move up one place. Although impacted by the global financial tsunami, the Asia-Pacific financial markets have managed to maintain a relatively fast speed of development.

Tokyo obviously takes the lead among the five cities in terms of indicators like financial market, industrial support, service level, and general environment, and is only slightly weaker in growth and development, ranking lower than Shanghai and Hong Kong.

Hong Kong achieves a balanced development in all five indicators with top rankings, especially in growth and development, second only to Shanghai. In terms of outbound banking transactions, Hong Kong is the world's 15<sup>th</sup> largest banking center. As of the end of 2008, there were 143 licensed banks in Hong Kong, of which 27 were granted restricted licenses and 28 were deposit-taking companies. In addition, 88 foreign banks set up representative offices in Hong Kong with a total of 1,300 branches. These foreign banks were from 37 countries, of which 71 ranked among the world's top 100. The banks in Hong Kong engage in a wide range of retail and wholesale banking businesses, such as deposits, trade financing, corporation finance, treasury, precious metals trading, and securities brokerage business. Hong Kong's foreign exchange markets are well developed and active in trading, holding an indispensable position in the global foreign exchange market. The city is well-connected with other foreign exchange markets, thus capable of 24-hour daily trading of foreign exchanges.

Singapore's strength lies in the city's industrial support as well as its balanced development in the other four aspects, leaving no obvious weakness. Singapore's economy is traditionally business-oriented, including re-exporting, export processing, and shipping. Being the largest seaport in Southeast Asia, an important commercial city and re-exporting center, Singapore is also an international financial center and an important aviation center. The city's economic development after the country's independence is fairly impressive, and it is known as one of the Four Asian Tigers. A separate international financial center dictates the strict separation of domestic and offshore financial markets, and allows offshore financial service only among non-residents. Singapore's offshore financial center is a typical example of separate international financial center. Its foreign exchange market is the world's fourth largest market with an average daily foreign exchange transaction of 101 billion US dollars.

Among the Asian financial centers, Singapore set up the first financial futures market; and it has an advanced financial futures market, which plays a significant role in promoting Singapore's international risk management activities. Meanwhile, Singapore's short-term capital market is also very active. Back to the 1970s, the income from the financial sector amounted to 5 percent of Singapore's GDP, which has risen to 12 percent today.

As the representative of BRICS financial centers, Shanghai is especially strong in Growth and Development, with relative factors ranking 1st in IFCD-2011. The strong Growth and Development is critically positive for in-depth development Shanghai's financial. Although the rank of Shanghai's financial arket factor does not changed, it's on the 7th is still high. Currently, the total amount of financial assets of Shanghai ranks the first in mainland China. The development of financial marketis mainly indicated by the development of direct financing. The direct financing amount of Shanghai accounts for more than a quarter of the nationwide, and the market's completeness of financial elements and financial structure, ranks the first in the country. Regarding the opening level of Shanghai's financial services, the number of the regional headquarters of foreign banks in China accounts for about two-thirds of the country.Cross-border financial services and related industry giants such as Citigroup, HSBC, Morgan Stanley, Bank of America, Blackstone Group, Deloitte, GE, McKinsey, RBS, BNP Paribas, AIG, PricewaterhouseCoopers, Standard Chartered Bank, Ernst & Young all set their China headquarters at Shanghai. Assets of foreign banks in Shanghaiaccounts for more than 80 percent of the total in China. But general environment factor shows the weak point of Shanghai, it is ranked 19th among the 45 cities this year, whichleaves space for Shanghai's future development.

Sydney, Australia's largest city and financial center, is also an important financial center in the Asia-Pacific region. Sydney is the home to the national headquarters of the Australian Stock Exchange, Reserve Bank of Australia and many local banks and Australian corporations; it is also the regional headquarters of many multinational corporations. The Sydney Futures Exchange is the world's 12<sup>th</sup> largest financial futures market and 19<sup>th</sup> futures and options exchange. The city's strength lies in service level and general environment, but is ranked bottom in financial market, growth and development, and industrial support compared with the other four cities in the region.

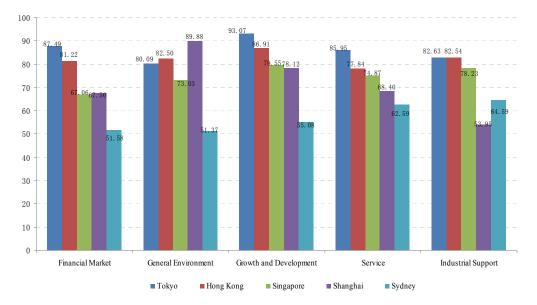


Chart 14 Indicator Scores Comparisons of the Top Five Asia-Pacific and African Cities

# III. Analysis of development of BRICS countries' financial centers

During the past decade, the world's geopolitical arena has been undergoing major adjustments. Especially after the global financial crises, there are increasing challenges to the world's traditional governance, economic development, and financial management models. During this period, the sustainable development in developing countries was indispensable to the stability of world economy. As an important segment of the developing countries, emerging economies have begun to feel it necessary in terms of strategy and reality to have stronger voices in various fields during the post-crisis era. In the future, international prosperity will not be realized without a fair, integrity and legitimate international financial structure evaluation system and a new economic and financial order.

Currently, the emerging countries are developing rapidly, providing opportunities for the countries around the world. At this historic moment, South Africa, representing the African region, joined the BRICS countries. Emerging countries have begun to cooperate and compete in international economic, finance. and political areas. During the past five years, the BRICS countries have enhanced their cooperation and formed a multi-level and



BRICS leaders gathered in Sanya for the third meeting on 14 April, 2011. The summit was hosted by Chinese President Hu Jintao. Brazilian President Dilma Rousseff, Russian President Dmitry Medvedev, Indian Prime Minister Manmohan Singh and South African President Jacob Zuma were invited to attend the meeting.

Chart 15 BRICS Leaders Meeting, 2011, Sanya, China

wide-range cooperation framework. During the G20 Summit held in South Korea in 2010, countries attending the summit reached agreement to transfer 4.6 percent of the votes in IMF to emerging economies, including the BRICS countries. This change indicated the rising voices of the BRICS countries, as well as from the emerging economies and developing countries.

In 2011, the International Financial Centers Development Index questionnaires system designed three questionnaires for the BRICS countries in an effort to find out the interviewees' understanding about their confidence in BRICS countries' financial centers, these centers' attractiveness to capital and talent, and the home currencies in these countries.

The research in 2011 continued to adopt the comprehensive evaluation method just as the one used in the 2010 research. Interviewees gave ratings to each city in questionnaires. The ratings range from one to five.

The following is the calculation of the index in the three questionnaires (take confidence index as example). The comprehensive confidence index of the "*i*"th city is  $x_i = \sum_{j=1}^{5} j \times f_{ij}$ . The  $f_{ij}$  stands for the proportion of the rating of "*j*" in all the confidence ratings for "*i*" cities.

#### (I) Confidence analysis of BRICS countries' financial centers

	1point	2 points	3 points	4 points	5 points	Comprehensive Scores	Rank		
Shanghai	7.93	10.54	21.71	28.97	30.85	3.64	1		
Moscow	9.71	21.26	32.66	25.36	11.01	3.07	2		
Sao Paulo	8.55	21.11	35.75	25.75	8.84	3.05	3		
Johannesburg	10.82	19.32	36.04	24.20 46	9.61	3.02	4		
Mumbai	11.21	21.21	34.20	22.	10.92	3.01	5		

Table 10 Confidence Comparison on Becoming International Financial Center in BRICS

Note: The data from the second column to the sixth column shows the proportion of each index in each score, and the unit is percentage.

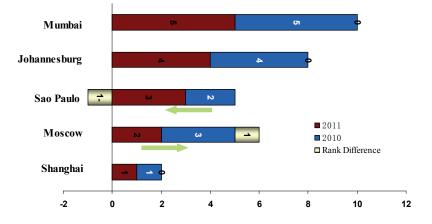


Chart 16 Analysis of Position Difference of Confidence Over BRICS Countries Financial Centers

Table 10 and Chart 16 show the composite scores for the confidence of the interviewees in each city's financial center. The scores have the following characteristics.

First, Shanghai still take lead this year, and is ranked the first of the five cities, followed by Moscow, Sao Paulo, Johannesburg, and Mumbai in that order. In 2011,

the rankings of Moscow and Sao Paulo are reversed. Johannesburg and Mumbai are still at the bottom.

Secondly, there is big difference between the confidence score of Shanghai and other cities. Shanghai's confidence score is 0.57 points higher than Moscow's. The largest difference among the other four cities is only 0.06 points, showing the confidence in these four cities does not vary much.

Thirdly, the proportion of "five" ratings for Shanghai is 30.85 percent, higher than the other four cities, among which the highest proportion of "five" ratings is 11.01 percent. Over 30 percent of the ratings for other four cities are "three", the medium level. This shows that confidence in Shanghai and other cities varies much.

#### (II) Attractiveness analysis of the BRICS countries' financial centers

During the past decade, the economic development in the BRICS countries played an important role in the global economy. The territory and population in these countries have had a decisive effect on their economic development. In 2010, the combined GDP of the BRICS countries represented 18 percent of total. world's while the their combined trade value accounted for 15 percent. From 2001 to 2010, trade

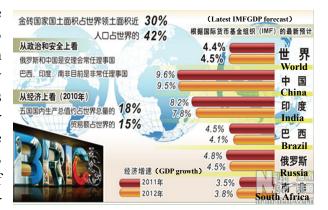


Chart 17 The basic economic situation of BRICS

among the BRICS countries grew at an annual rate of 28 percent.

Besides trade, the BRICS countries' attractiveness to capital has also been increasing. At the same time, the capital cooperation among these countries began to take on new features. China began to export capital via new cooperation models, such as loans for energy, resources, and infrastructure agreements with the BRICS countries, while China still remains as an attracting destination for investment from other countries.

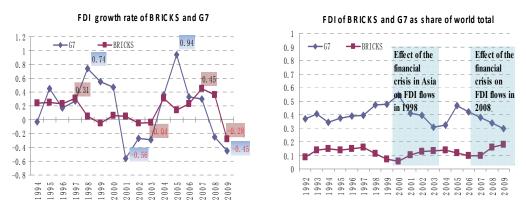


Chart 18 FDI Growth Rate and Share of World Total of BRICS

Chart 18 shows that the annual growth rate of foreign direct investment (FDI) in the G7 countries has fluctuated widely since the 1990s. In fact, FDI in the BRICS countries maintained steady growth. During the past two decades, the annual growth rate of the FDI in the BRICS countries was mostly positive and took on upward trend despite the sluggish world economy. Despite this, the annual growth rate of the FDI in the G7 countries showed sharp declines or were even negative. This showed that the emerging markets could find opportunities during the economic crises to reinforce their economic strength.

From Chart 18, we can see the proportion of BRICS countries' FDI in the world was much smaller than that of the developed markets, such as G7 countries, when the BRICS countries were at the early stage of their development. However, after 10 years of steady growth, the proportion of the world's FDI by the BRICS countries has become much closer to the G7 countries. During the past two financial crises, the BRICS countries showed stronger vitality than the developed economies. After the Asian financial crisis in 1998, the proportion of the G7's FDI in the world dropped to 31 percent in 2003 from 54 percent in 2000. At the same time, the share of the BRICS countries' FDI rose to 13.5 percent from less than 6 percent. After the global financial crisis in 2008, the ratio of the BRICS countries kept rising to 18 percent, a historic high, while the G7's proportion dropped to 30 percent, the lowest level in history.

Among the BRICS countries, China took the lead in terms of the scale of FDI. In 2009, the FDI in China accounted for 48 percent of the five countries' total. However, China's proportion declined slightly from 53 percent in 1999 to 48 percent in 2009, while the proportion of India and Russia registered fast growth. The ratio of India rose to 17 percent in 2009 from 3 percent in 1999, while that of Russia increased to 19 percent from 4 percent. Thanks to the fast growth of the FDI in India and Russia, the gap between China and the other countries has been narrowed, indicating the coexistence of cooperation and competition among the BRICS countries.

Emerging economies have become the major destinations for global capital flows. According to a report released by the Institute of International Finance, the private capital flowing into emerging economies increased 50 percent in 2010 to 908 billion US dollars. The private capital flowing to emerging economies is expected to rise to 960 billion US dollars in 2011, and to hit 1 trillion US dollars in 2012. Meanwhile, overseas investments of the emerging economies were also on the rise. In the first half of 2010, companies from the emerging economies were involved in 243 deals in the developed economies, far more than the 194 deals in the second half of 2009. In addition, cross-border mergers and acquisitions (M&A) in emerging economies also increased sharply.

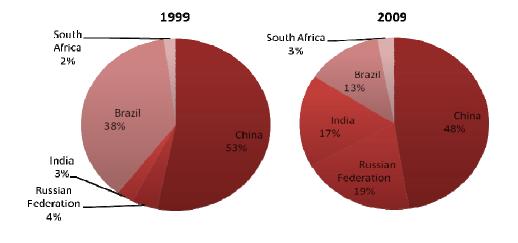


Chart 19 FDI Flow Comparison of BRICS Countries

The analysis of capital and intelligence gives us the views of the interviewees on the attractiveness of the BRICS countries in terms of capital and the intelligence, which are the basic elements for the development of an economy. Special Investigation: Capital and Talent Factors of BRICS 2011 Capital Consideration: If you are the leader and decision-maker of a large multinational financial institution and you want to provide financial services in the financial centers of the following BRIC countries, what is your rating on their attractiveness? Talent Consideration: If you have a chance to work or develop your career in the financial centers of the following BRIC countries, what is your rating on their attractiveness?

	1point	2 points	3 points	4 points	5 points	Power to Attract Capital	Ranks
Shanghai	13.70	10.88	17.98	25.24	32.19	3.51	1
Moscow	11.09	21.62	30.75	26.66	9.88	3.03	2
Johannesburg	12.76	20.83	33.08	20.98	12.36	2.99	3
Sao Paulo	9.57	23.73	37.03	22.37	7.30	2.94	4
Mumbai	15.42	21.06	34.36	20.30	8.87	2.86	5

Table 11 Score Result of Capital Indicator of BRICS Financial Centers

Note: The data from the second column to the sixth column shows the proportion of each index in each score, and the unit is percentage.

Table 1	Table 12 Score Result of Talent Indicator of BRICS Financial Centers								
	1point	2 points	3 points	4 points	5 points	Power to Attract Talent	Ranks		
Shanghai	13.01	13.06	18.91	26.88	28.14	3.44	1		
Sao Paulo	10.78	19.24	36.22	24.43	9.32	3.02	2		
Johannesburg	12.95	22.33	31.10	20.97	12.65	2.98	3		
Moscow	13.40	21.96	29.82	23.22	11.59	2.98	4		
Mumbai	17.64	21.02	30.49	20.01	10.84	2.85	5		

Note: The data from the second column to the sixth column shows the proportion of each index in each score, and the unit is percentage.

The Table 11, 12 and Chart 20 show the following features of the interviewees' rating on the attractiveness of the financial centers in the BRICS countries.

First, the rating for Shanghai's attractiveness to capital and intelligence is significantly higher than that for the other cities, ranking it the first among the five cities. In terms of capital attractiveness, Shanghai is ranked the first and followed by Moscow, Johannesburg, Sao Paulo, and Mumbai. The ranking of Shanghai and Moscow in terms of capital attractiveness is in line with China and Russia's FDI proportions shown in Chart 19. In terms of intelligence attractiveness, Shanghai still takes the first place, and Sao Paulo, Johannesburg, Moscow and Mumbai are ranked after Shanghai.

Secondly, there are great differences between the ratings for Shanghai and the other four cities. In terms of capital attractiveness, the rating for Shanghai is 0.48 points higher than Moscow which is ranked second. The largest difference among the other four cities is only 0.17 points, indicating the four cities' attractiveness to capital does not vary much. In terms of intelligence attractiveness, Shanghai's rating is 0.42 points higher than Sao Paulo, which is in the second place. The largest rating

difference among the other four cities is 0.17 points, still showing no great variation. Except for Shanghai, interviewees hold high expectations for Moscow in terms of capital attractiveness and think highly of Sao Paulo in terms of intelligence attractiveness. This is reflected in the difference in interviewees' understanding about these cities in their attractiveness to different core elements.

Thirdly, the proportions of interviewees giving Shanghai all five points mark for attractiveness to capital and intelligence are respectively at 32.19 percent and 28.14 percent, higher than for the other four cities, among which the highest proportion of 5 points mark is 12.36 percent for capital attractiveness and 12.65 percent for intelligence attractiveness. About 30 percent of the ratings for other four cities are "three", the medium level.

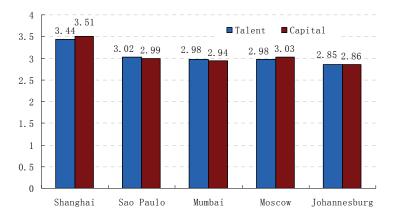


Chart 20 Analysis of Confidence Over BRICS Financial Centers

# (III) Analysis of familiarity with BRICS countries' currencies

	1point	2 points	3 points	4 points	5 points	The scores of "familiarity with BRICS countries' currencies"	Rank
(CNY, China)	17.14	15.08	20.17	20.59	27.02	3.25	1
(RUB, Russia)	15.29	21.41	32.37	20.54	10.40	2.89	2
(INR , India)	18.06	22.44	33.09	16.83	9.57	2.77	3
(REAL, Brazil)	22.85	24.50	26.09	18.43	8.13	2.64	4
(ZAR, South Africa)	29.30	22.14	26.78	13.34	8.44	2.49	5

Table 13 Comparison of familiarity with BRICS countries' currencies

Note: The data from the second column to the sixth column shows the proportion of each index in each score, and the unit is percentage.

Along with the enhanced influence of the BRICS countries, they have become a widely recognized group. They began to seek development in the fields of politics, economic, financial areas, and foreign affairs. One of their initiatives in economic and financial areas has to promote the reform on international monetary and financial order. The BRICS countries are seeking to increase their influence in international

organizations, such as the International Monetary Fund and the World Bank, and gradually to increase their recognition in the monetary field generally.

In order to get a picture of the world's familiarity with the currencies of the BRICS countries, this year's research includes a questionnaire about this issue.

Tables 11, 12 and Chart 20 show the recognition level of the interviewees of the BRICS countries' currencies.

First, the RMB or yuan (the Chinese currency), is the currency with the highest recognition. The Russian ruble is ranked second and followed by Indian rupee, Brazilian real, and South African rand.

Secondly, compared to the results of the confidence and attractiveness indicator analysis, the ratings for familiarity with the currencies do not vary much. The difference between the ratings for the RMB and ruble which is ranked in the second place was 0.36 points, while the difference between the RMB and the rand, which is ranked fifth, is 0.76 points. Except for the RMB, the largest rating difference among the other four currencies is 0.4 points. The high recognition for the RMB is attributed to China's strong economic growth, as well as its efforts to promote RMB exchange rate reform and the internationalization of the RMB.

Thirdly, over 20 percent of respondents give the RMB a rating of three to five marks. For Russian ruble, the rating whose share is over 20 percent is in the range two to four. For Indian rupee, the rating with its proportion over 20 percent is within the rating area of two to three. For the real and the rand, the rating with its ratio over 20 percent is in the range one to three. It shows that the RMB is getting a lot of attention.

On expectations of the opening-up of China's capital account, the RMB, as a representative of the emerging economies' currencies, has a strong possibility to become a major international settlement and reserve currency in the future.

# IV. Introduction to the research approach

# (I) Construction of the objective indicator system of IFCD

The analytical framework of the Xinhua-Dow Jones International Financial Centers Development Index (IFCD) is made up of the combination of an objective indicator system and subjective questionnaire survey, so as to provide a comprehensive appraisal of a city as an international financial center by objective and subjective evaluation.

#### 1. Design principles of the objective indicator system

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

(1) Reflecting the development potential of financial centers. The design of the Xinhua-Dow Jones International Financial Centers Development Index aims to reflect development potential of financial centers, and aims to show the development potential as completely and accurately as possible through indicator selection, weight decision, data collection, and approach to calculation.

(2) The principle of operability. The design of the Xinhua-Dow Jones International Financial Centers Development Index gives full consideration to the stability of data sources, standardization and continuity of data, unified standards, convenience in data collection and calculation, and clarification of the appraisal indicator's connotations.

(3) Representativeness of indicators. The selection of each indicator of the Xinhua-Dow Jones International Financial Centers Development Index 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.

(4) Relatively independence of indicators. The objective indicator's connotation of the Xinhua-Dow Jones International Financial Centers Development Index is clear and relatively independent. One indicator does not overlap with another, and indicators do not possess reciprocal causation relations. The entire index system closely centers round various connotation levels of the competitiveness and development of international financial centers.

(5) Indicators are relatively connected. Each indicator of the Xinhua-Dow Jones International Financial Centers Development Index system can reflect part of the picture, and indicators share some connections, so as to ensure the systematic nature of the indicator system. Various indicators jointly constitute the index system, and try to reflect the connotation of financial centers from as many aspects as possible.

(6) Condensation of indicator numbers. The Xinhua-Dow Jones International

Financial Centers Development Index aims to rationalize and condense its indicator amount, intends to show the basic content of the connotation of an international financial center, and uses as few indicators as possible while making sure of providing full explanations of problems, thus making the system as condense and accurate as possible.

The Xinhua-Dow Jones International Financial Centers Development Index operates a more scientific and complete design on the basis of learning intensively from other's strong points in terms of the establishment of an indicator system, calculation model, and selection of original data.



Chart 21 The Design Framework of IFCD Index

# 2. Structure of objective indicator system

The objective indicator system of the International Financial Centers Development Index is formed by a three-level indicator system, reflecting the financial development level and current situation of various regions in five aspects, namely financial market, growth and development, industrial support, service level 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 level is a measure of international financial institution's development ability; and the general environment is a measure of the environment's impact on the development of an international financial center.



Chart 22 Indicator System of IFCD Index

The Xinhua-Dow Jones International Financial Centers Development Index is formed by a three-level indicator system, of which the first-level indicator is made up by five parts, reflecting the financial development level and condition of various regions from financial market, growth and development, industrial support, service level and general environment.

The stability and full development of the financial market is a key aspect and foundation for the international financial market. Of the Xinhua-Dow Jones International Financial Centers Development Index system, the indicator of financial market includes four second-level indictors and 16 third-level indicators, mainly reflecting the scale, stability and maturity of capital market, forex market, banking market, and insurance market.

Besides the prosperous development of various financial institutions, an international financial center is supposed to possess a strong growth capability. Of the index system, the indicator of growth and development reflects innovation ability and the growth level of various countries and regions. The indicator includes four second-level indicators and 14 third-level indictors, evaluating a city's growing and development capability from the growth potential of the capital market, growth potential of the economy, the city's current innovation situation, and innovation potential.

The establishment of an international financial center not only needs the prosperous development of the financial industry; support and assistance from related industries are also of paramount importance. The indicator of industrial support reflects the current situation of relating industries for the development of financial industry of a country or region. The indicator is made up by three second-level indicators and 12 third-level indicators, evaluating the capability of a financial

supporting system from the commercial environment of a region, a city's basic conditions, and the city's current infrastructure.

As a key part of a modern service industry, financial industry's development depends heavily on the improvement and provision of relating service. Of the index system, the indicator of service levels includes three second-level indicators and 12 third-level indicators, reflecting the ability of providing relating service of a region from government service levels, intellectual situation of human resources, and city environment.

An international financial center grows and develops under the various environments of an entire country, so general environment is a very important element affecting the development of the financial industry. Of the index system, the indicator of general environment includes three second-level indicators and 12 third-level indicators, evaluating the region's general environment development in terms of economic environment, political environment, and the degree of opening to the outside.

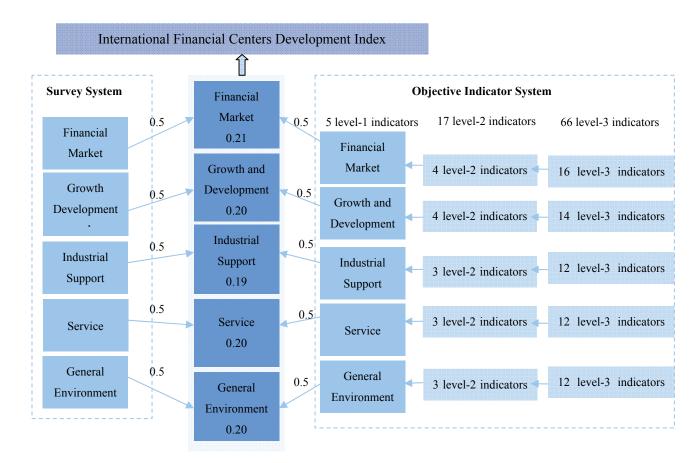


Chart 23 Construction Structure of IFCD Index

## 3. Analytical approach and framework

#### (1) Levels of logical analysis

In the design of index application analytical approach, a multi-level analytical 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 Centers Development Index, dividing the 45 cities into four types on the different index scores. The four types of financial centers are mature financial center, developing financial center, comprehensive financial center, and regional financial center. The emphasis of the second level analysis is to analyze the advantages and shortcomings of each financial center by breaking down the International Financial Centers 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 five BRICS countries by reviewing these hot-spots of world economic development, so as to collect global respondents' confidence, capital and talent attractiveness, as well as knowledge of the five countries' monetary policies, assisted by the confidence survey data collected by Xinhua News Agency's global International Financial Centers Development Index survey system.



Chart 24 The Analysis Framework of IFCD Index

#### (2) Approach of index calculation

The Xinhua-Dow Jones International Financial Centers Development Index is calculated from the People's University of China's competitiveness and evaluation research center's symmetric design competitiveness model (People's University of China's symmetric design model in short). The index system combines both objective data and subjective questionnaire survey. The use of a subjective questionnaire survey is to characterize indicators that are hard to quantify, and provide a useful supplement to the objective indicator system. The design of the model adopts symmetric system design between objective indicators and subjective indicators, acting as a scientific foundation for data collection and organization, and direct survey in gathering data.

The People's University of China's symmetric model is an authoritative model

based on R&D of competitiveness theory over the years. The application mode of the International Financial Centers Development Index is to use lots of indicators, symmetric design, and equilibrium efficiency composition method. As the development of international financial centers is a huge system, there are quite a number of indicators to be described, especially when the competition scope becomes ever wider and the number of elements affecting the system increases due to informatization and globalization. The calculation approach design of the People's University of China's symmetric design model can effectively handle information by symmetric design and setting up a systemic information platform with unified standards, thus providing important support for a deeper research of the development of international financial centers, which is central to the competitiveness of the Xinhua-Dow Jones International Financial Centers Development Index model.

The calculation of a comprehensive index and an element index emphasizes the direct and concise information integration and respect to the structure of the evaluation system. First, data will be processed to be comparable, 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. After that, an element evaluation index and a comprehensive index will be calculated via two-level summarizing at equal weight supported by symmetric design.

The so called two-level summarizing at equal weight is to calculate the score value of each second-level indicator from third-level indicators, and then summarize and calculate each third-level indicator by the same weight via the above approach. Because each second-level indicator is measured by different amount of three-level indicators, it is necessary to distinguish the importance of different second-level indicators. Therefore, equal weight calculation is adopted when summarizing the second-level indicators, the international financial center general index of each region can be calculated by calculating the arithmetical average of the five values.

#### (3) Sample selection and data collection

The Xinhua-Dow Jones International Financial Centers Development Index selects 45 international financial centers as samples across the world, and it is an index completely focused on the development of global international financial centers.

The objective data of the Xinhua-Dow Jones International Financial Centers Development Index all comes from authoritative third parties, so the data sources are stable and reliable. Besides, most of the objective data is average of the past three years, thus reducing any impact from incomparable factors. Besides reports released by such authoritative institutions as World Bank, World Economic Forum, International Monetary Fund, and reports by world well-known companies, stock exchanges and authoritative websites, the People's University of China's international competitiveness and innovation research report, and some authoritative reports by the Chinese Academy of Social Sciences, and Chinese Academy of Sciences are also introduced, reflecting the integration of world standards and the permeation of Chinese elements.

The data of the subjective questionnaire survey come from Xinhua News Agency's global information collection network and AC Nelson's worldwide survey system. The full use of Xinhua News Agency's information collection network effectively guarantees the quality of obtained information.

## (II) Analytical approach of questionnaire survey

Measuring the strength of international financial centers by objective indictors is the foundation to reflect the development of an international financial center, but objective indicators do not provide a complete evaluation. As a hub for capital flows, such soft strength for a financial center as environment, popularity, and attractiveness can not neglected. Therefore, the Xinhua-Dow Jones International Financial Centers Development Index employs Xinhua News Agency's global information collection network and the survey network of Xinhua's cooperative partner, AC Nelson, and develops and establishes the global international financial center city questionnaire survey system to measure an international financial center's soft strength in a complete and scientific way.

## (III) Comprehensive approach of IFCD's indicators

With regard to the comprehensive application approach of the 66 objective indicators and subjective indicators obtained via the questionnaire survey, the project team holds the People's University of China's symmetric design model can make full use of objective indicators and subjective indicators' comprehensive information and characteristics. When integrating objective indicators and subjective indicators, the model adopts differentiated weights to show each indicator's importance. Therefore, the calculation of the International Financial Centers Development Index adopts the People's University of China's symmetric model, which grants the appropriate weights to the objective indicator system and the subjective indicator system to obtain a comprehensive evaluation.

Renmin University of China's symmetric design model integrates survey data from Xinhua News Agency and AC Nelson with the outcome of objective indicators. Taking AC Nelson's survey data as an example, the specific integration approach is: each country gets values of five indicators out of the calculation results of objective indicators, and the final analysis outcome of survey data will also arrive at values of the five indicators. The arithmetical average of the two values (drawn from objective indicators and survey data) of each indicator is a country's final score for each of the five indicators. After that, the model conducts weighted average on the five indicators, and the weight of each indicator is the score of the indicator calculated from the questionnaire survey.

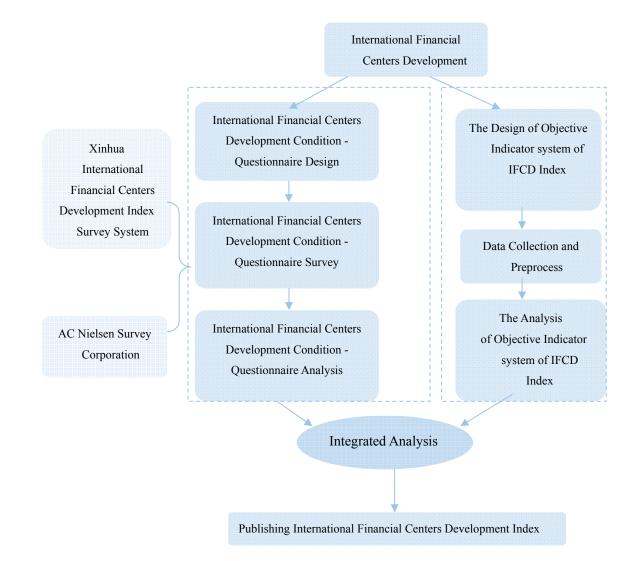


Chart 25 The Research Route Map of IFCD Index

# **Appendix:**

#### I. Analysis of questionnaires

The data for index analysis in 2011 comes from two channels, 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 2,073 valid questionnaires with high-quality data, of which, 1,641 copies were received by AC Nielsen and 432 copies were returned to Xinhua.

### (I) Basic information of questionnaires

#### 1. Job title

Of the 2,073 questionnaires, the profile of jobs of respondents is pyramid shaped. Survey respondents holding higher positions account for a lower proportion of total respondents. Common employees take the highest share, accounting for 42.2 percent of the total survey respondents.

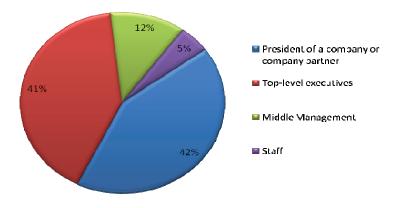


Chart 26 The Distribution of Respondents' Occupations

#### 2. Industries worked in by survey respondents

Some 15.2 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 14 percent.

	Frequency	Proportion
Investment Banking	158	7.6
Commercial Banking	290	14.0
Retail Banking	170	8.2
Insurance	226	10.9
Asset Management	143	6.9
Legal Services	95	4.6
Accounting Services	244	11.8
Trade Association	163	7.9
Regulatory Body/Central Bank	27	1.3
Government	316	15.2
Research Institute	159	7.7
Other – Please Specify	73	3.5
Missing	9	0.4
Total	2073	100.0

Table 14 Distribution of Respondents' Occupation

#### 3. Location of headquarters of respondents' workplaces

There are 41 cities, where headquarters of organizations of survey respondents are located, with number of statistics samples exceeding or equaling 10. Except Guangzhou of China, the other 40 cities are all in the scope of the 45 cities surveyed.

Code	City	Sample number	Proportion
37	Beijing	124	5.98
24	Toronto	82	3.96
29	New York	73	3.52
40	Seoul	72	3.47
26	Washington	68	3.28
32	Tokyo	67	3.23
13	London	67	3.23
38	Shanghai	65	3.14
9	Copenhagen	64	3.09
42	Hong Kong	63	3.04
33	Osaka	48	2.32
4	Paris	39	1.88
39	Shenzhen	39	1.88
20	Stockholm	39	1.88
5	Budapest	38	1.83
14	Rome	38	1.83
2	Vienna	38	1.83
6	Brussels	37	1.78
41	Taipei	36	1.74
35	Mumbai	33	1.59
17	Moscow	33	1.59
21	Zurich	32	1.54
15	Madrid	31	1.50
23	Buenos Aires	30	1.45
7	Dublin	30	1.45
11	Lisbon	30	1.45
36	Singapore	29	1.40

Table 15 Distribution of Respondents' Cities

44	Melbourne	28	1.35
45	Sydney	28	1.35
16	Milan	27	1.30
10	Helsinki	26	1.25
30	Sao Paulo	26	1.25
3	Oslo	25	1.21
18	Munich	25	1.21
31	Vancouver	23	1.11
28	Montreal	21	1.01
25	Chicago	21	1.01
22	Boston	19	0.92
N/A	Guangzhou	19	0.92
8	Frankfurt	16	0.77
1	Amsterdam	10	0.48
	Other Cities and Missing	414	19.97
	Total	2073	100

#### 4. Number of employees

Of the organizations where the survey respondents work in, those with more than 5,000 staff take the highest proportion, accounting for 35.8 percent. Organizations with less than 100 staff account for 16.2 percent. And the other four types of organizations respectively account for about 10 to 15 percent. It shows that scale of surveyed organizations is relatively even.

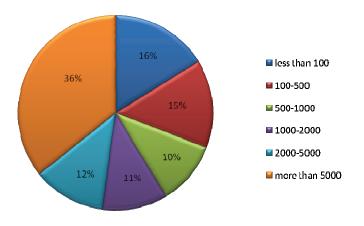


Chart 27 The Distribution of Respondents' Organzation Size

## (II)Analysis on questionnaire credibility and validity

#### 1. Credibility analysis

Survey respondents gave scores to Question 6 (importance), Question 7 (confidence on BRICS nations' financial centers), Question 8 (capital and human recourse attraction of BRICS nations' financial centers) and Question 9 (familiarity with currencies of BRICS nations' financial centers). Credibility analysis shows that the Cronbach's Alpha is 0.755, 0.631, 0.639 and 0.797, respectively. When Cronbach's Alpha is higher than 0.7, it is generally believed that internal consistency of the questionnaires is high. Therefore, the credibility of questionnaire is high on the

scoring part.

#### 2. Validity specification

After making indicator analysis on Question 6, Question 7, Question 8 and Question 9, we find that the variance contribution ratio of their first principal component stands at 51.2 percent, 41.7 percent, 24.8 percent and 56.7 percent respectively. That of Question 6 and Question stands above the benchmark 50 percent, which is believed to indicate high validity.

#### **II.** Further analysis

# (I) Analysis on indicator and importance valuation by survey respondents in different industries

Excluding nine samples not filling in the industry options from the 2,073 effective questionnaires, 2,064 valid 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 1,014 questionnaires from financial cycle and 1,050 questionnaires from non-financial respondents.

#### 1. Indicator scores

Adopting the same analysis method with 2010, we planned to list the top 15 cities respectively picked up by financial and non-financial institution staff, in order to directly collect the valuation of survey respondents in various occupations on the Financial Centers Development indicators of the world's major cities. We did this because survey respondents gave higher scores on the top 15 cities (basically above one scores), which can avoid severe fluctuation from low valuation scores.

From Table 16 we know that, except for the different opinions found from respondents about Amsterdam and Dubai, non-financial and financial institution staff all believe that 14 cities including New York, London and Tokyo should enter the world's top 15 in terms of their financial markets. This shows that survey respondents in different occupations have a relatively consistent opinion about which cities are strongly competitive in the financial market. This is slightly different from the results in 2010. Differences existed in the choice of Boston and Dubai in 2010, which reflects that survey respondents this year hold relative different opinions on choosing Dubai as an international financial center. But Dubai has higher influence in the Middle Eastern and even in the world. For Amsterdam, although survey respondents hold different opinions on whether it should be in the top 15, Amsterdam ranks 10th in the complex ranking of 45 cities, relying on its strong financial market and general environment.

		F	Practitioners		
Rank	Financial Prac		Non-Financial P	Practitioner	Rank Difference
Kank	City	Score	City	Score	
1	New York	7.28	New York	6.68	0
2	London	6.18	London	5.50	0
3	Tokyo	4.68	Tokyo	4.32	0
4	Hong Kong	3.91	Hong Kong	3.42	0
5	Singapore	2.71	Paris	2.64	-2
6	Frankfurt	2.62	Frankfurt	2.32	0
7	Paris	2.45	Washington	1.98	-5
8	Shanghai	2.05	Singapore	1.91	3
9	Beijing	1.56	Shanghai	1.75	1
10	Zurich	1.56	Beijing	1.53	1
11	Chicago	1.45	Zurich	1.50	1
12	Washington	1.43	Geneva	1.48	-3
13	Sydney	1.29	Chicago	1.44	2
14	Amsterdam	0.99	Sydney	1.32	1
15	Geneva	0.96	Dubai	1.32	-1

Table 16 Evaluation on Financial Market by Financial Practitioners and Non-Financial

In terms of ranking and volatility, New York, London, Tokyo and Hong Kong always occupy the top four positions. Differences on city selection by financial and non-financial institution staff is mainly in the emerging economies and the traditional European financial centers under the influence of financial crisis. But financial and non-financial institution staff holds relatively consistent opinions on the financial market performance of cities.

Rank	Financial Prac	ctitioner	Non-Financial P	ractitioner	Rank Difference
INDIK	City	Score	City	Score	Italik Dillerence
1	Shanghai	4.46	Shanghai	3.86	0
2	New York	4.07	New York	3.74	0
3	Hong Kong	3.95	Hong Kong	3.63	0
4	Tokyo	3.07	Beijing	3.12	-2
5	London	3.04	Tokyo	2.99	1
6	Beijing	2.97	London	2.72	1
7	Singapore	2.80	Singapore	2.32	0
8	Dubai	2.10	Dubai	2.24	0
9	Mumbai	1.70	Paris	1.54	-2
10	Seoul	1.52	Mumbai	1.50	1
11	Paris	1.50	Seoul	1.46	1
12	Sydney	1.49	Frankfurt	1.38	-2
13	Shenzhen	1.49	Moscow	1.27	-2
14	Frankfurt	1.27	Sydney	1.24	2
15	Moscow	1.24	Shenzhen	1.24	2

Table 17 Evaluation on Growth and Development by Financial Practitioners and Non-Financial

Practitioners

From Table 17 we know that, as with 2010, financial and non-financial institution

staff holds the same opinion on the top 15 cities in terms of growth and development, showing that survey respondents hold similar idea on cities with strong growth and development. But in terms of structure, survey respondents are optimistic at growth of Shanghai. Both financial and non-financial institution staff believes Shanghai ranks the top in terms of growth, respectively rising one and three by ranking from last year. In fact, Shanghai also ranks first in terms of growth indicators. Besides, Beijing also ranks relatively high. Mumbai has moved up one and two places by ranking. Survey respondents still think highly of other cities of developed countries which rank high due to their stock factor.

	Financial Prac		Practitioners Non-Financial P	ractitionar	
Rank		1			Rank Difference
	City	Score	City	Score	
1	New York	5.33	New York	4.50	0
2	London	4.27	London	3.58	0
3	Tokyo	3.73	Tokyo	3.21	0
4	Hong Kong	3.43	Hong Kong	2.85	0
5	Singapore	2.70	Paris	2.14	-3
6	Shanghai	2.43	Shanghai	2.13	0
7	Frankfurt	2.00	Beijing	1.96	-2
8	Paris	1.93	Frankfurt	1.94	1
9	Beijing	1.81	Singapore	1.90	4
10	Chicago	1.48	Washington	1.61	-2
11	Sydney	1.44	Chicago	1.53	1
12	Washington	1.37	Dubai	1.50	-2
13	Zurich	1.26	Geneva	1.29	-4
14	Dubai	1.21	Amsterdam	1.28	-2
15	Seoul	1.10	Munich	1.24	-4

Table 18 Evaluation on Industrial Support by Financial Practitioners and Non-Financial Practitioners

In terms of industrial support, relatively big differences exist in structure between 2011 and 2010. Survey respondents in 2011 both in financial and non-financial institutions all believe that 12 cities including New York, London, and Tokyo should enter the top 15 and they made the same selections of the top nine cities. This is different to 2010, when same selections were made of the top 13 cities. It shows that survey respondents hold different opinions on the industrial support of cities and that industrial support changes in different stages of development. The top four cities, including New York, London, Tokyo, and Hong Kong, have stable industrial support, while other cities, under the influence of financial crisis and fluctuation of self-economic cycles, have seen changes of their industrial structure, which had an influence on the development of indicators. Survey respondents hold different opinions on the industrial structure, which had an influence on the industrial supports of six cities including Sidney, Zurich, Seoul, Geneva, Munich, and Amsterdam. While last year, different opinions existed in the cities of Toronto, San Francisco, Vancouver, Amsterdam, and others.

Rank	Financial Practitioner		Non-Financial P	ractitioner	Rank Difference	
Nalik	City	Score	City	Score		
1	New York	5.08	New York	4.33	0	
2	London	4.39	London	3.79	0	
3	Tokyo	3.21	Tokyo	2.90	0	
4	Hong Kong	3.07	Paris	2.56	-2	
5	Singapore	2.65	Hong Kong	2.07	1	
6	Paris	2.40	Washington	1.77	-5	
7	Frankfurt	1.91	Frankfurt	1.71	0	
8	Sydney	1.60	Singapore	1.66	3	
9	Zurich	1.52	Amsterdam	1.65	-6	
10	Shanghai	1.51	Geneva	1.61	-3	
11	Washington	1.40	Sydney	1.50	3	
12	Chicago	1.33	Munich	1.49	-5	
13	Geneva	1.32	Zurich	1.40	4	
14	Toronto	1.29	Copenhagen	1.38	-12	
15	Amsterdam	1.27	Oslo	1.34	-17	

Table 19 Evaluation on Service by Financial Practitioners and Non-Financial Practitioners

In terms of service levels, survey respondents have quite different opinions about developed countries and emerging economies and show little confidence in the service levels of the emerging economies. For instance, financial institution staff scores Shanghai the 10<sup>th</sup> place, while non-financial institution respondents only ranks the city 15<sup>th</sup> and even exclude Mumbai from their selections. The top 15 cities chosen by non-financial institution staff are all financial centers on the American and European continents with smaller European cities like Copenhagen and Oslo short listed; but rankings of the two cities vary from financial and non-financial staff, which stood at 12<sup>th</sup> and 17<sup>th</sup> respectively.

Rank	Financial Pra	ctitioner	Non-Financial P	ractitioner	Rank Difference
Nalik	City	Score	City	Score	
1	New York	5.00	New York	4.20	0
2	London	4.36	London	3.64	0
3	Tokyo	2.96	Tokyo	2.37	0
4	Hong Kong	2.66	Paris	2.33	-1
5	Paris	2.41	Amsterdam	1.96	-6
6	Singapore	2.39	Hong Kong	1.88	2
7	Frankfurt	1.87	Washington	1.77	-3
8	Sydney	1.69	Sydney	1.63	0
9	Chicago	1.59	Copenhagen	1.63	-12
10	Washington	1.52	Frankfurt	1.62	3
11	Amsterdam	1.46	Singapore	1.58	5
12	Shanghai	1.42	Geneva	1.57	-3
13	Zurich	1.41	Oslo	1.53	-12
14	Toronto	1.39	Stockholm	1.42	-10
15	Geneva	1.30	Zurich	1.41	2

Table 20 Evaluation on General Environment by Financial Practitioners and Non-Financial Practitioners

In terms of general environment, there are many changes in the rankings of 2010 and 2011 by financial and non-financial institution staff receiving the questionnaire survey. In 2010, all divergence is within four places except for one eight-place difference. However, in 2011, 10-plus divergence occurs three times, which are all European cities. This is attributable to the economic recovery in Europe as well as the debt crisis. Among the cities from the emerging economies, only Shanghai gets short listed by financial institution staff.

#### 2. Importance

Table 21 Evaluation on Importance of Each Indicator by Financial Practitioner and Non-Financial Practitioner

Pracutioner							
	Financia	al Practitioner	Non-Financial Practitioner				
	Scores	Rank	Scores	Rank			
Financial Market	3.92	1	3.65	3			
Growth and Development	3.78	4	3.64	4			
Industrial Support	3.70	5	3.58	5			
Service	3.82	3	3.67	2			
General Environment	3.90	2	3.77	1			

The valuation on indicator importance is different from 2010. In 2010, both financial and non-financial institution staff believed that the financial market was the

most important indicator. General environment and the growth and development rank the second and third respectively. Noticeable changes occur in 2011. Non-financial institution staff rank the financial market third, the general environment first, and service level at third. It can be seen that more people pay attention to general development of the economy and finance and the improvement of city environment and service level, instead of only stressing the importance of the financial market itself.

#### (II) Analysis on indicator and importance valuation by region

Excluding 14 samples not filed in the cities where the headquarters of survey respondents' organizations are located from the 2,073 valid questionnaires, 2,059 effective samples are left. As fewer headquarters of survey respondents' organizations are located in South America, Oceania and Africa, we combined the three continents and obtained the detailed location of samples in Table 22.

Area	Sample	Proportion
Europe	892	43.3
North America	396	19.2
Asia	637	30.9
South America, Oceania	134	6.5

Table 22 Distribution of Respondents' Headquarters in Each Continent

Rank	Europe		North Ame	erica	Asia		Other Contin	nents
raiik	City	Score	City	Score	City	Score	City	Score
1	New York	6.33	New York	7.88	New York	7.46	New York	6.61
2	London	5.58	London	5.91	London	6.36	London	5.07
3	Tokyo	3.95	Tokyo	4.76	Tokyo	5.14	Tokyo	4.46
4	Hong Kong	3.02	Hong Kong	3.89	Hong Kong	4.56	Sydney	3.25
5	Frankfurt	2.94	Paris	2.30	Singapore	3.48	Hong Kong	3.07
6	Paris	2.59	Frankfurt	2.29	Shanghai	3.00	Paris	2.67
7	Zurich	2.22	Chicago	2.14	Paris	2.66	Beijing	2.14
8	Washington	1.77	Toronto	2.11	Frankfurt	2.17	Washington	2.10
9	Geneva	1.73	Singapore	2.04	Chicago	2.13	Sao Paulo	2.01
10	Singapore	1.71	Shanghai	1.76	Washington	1.79	Melbourne	1.69
11	Brussels	1.48	Beijing	1.43	Beijing	1.64	Dubai	1.62
12	Beijing	1.43	Boston	1.40	Seoul	1.13	Zurich	1.54
13	Dubai	1.37	Washington	1.33	Sydney	1.11	Singapore	1.46
14	Amsterdam	1.35	San Francisco	1.22	San Francisco	0.95	Amsterdam	1.41
15	Shanghai	1.31	Sydney	1.20	Zurich	0.93	Frankfurt	1.39

## 1. Indicator scores

Table 23 Evaluation on Financial Market by Respondents From Different Areas

In terms of financial market, the degree of recognition of survey respondents of majority of cities is relatively consistent, all of which are traditional financial centers. But as for structure, survey respondents all give high evaluation of financial centers in the continents where they live. For instance, survey respondents from Europe pay less attention to the cities of emerging economies. Some attention is paid to Shanghai and Beijing, but the rankings of the two cities still lag behind. Growth is given priority in the ranking of Asian cities and Shanghai, Beijing, Seoul, and Sydney rank high. Survey respondents from America seldom chose cities from Europe. Except for several cities ranked top, a majority of the cities ranked above 15<sup>th</sup> selected are American cities. Shanghai and Beijing of Asia were also mentioned, but different opinions existed on the ranking of cities from other continents.

Rank	Europe		North Ame	erica	Asia		Other Contir	nents
Malik	City	Score	City	Score	City	Score	City	Score
1	Hong Kong	3.66	New York	5.25	Shanghai	5.85	New York	4.81
2	New York	3.45	Shanghai	4.22	Hong Kong	4.29	Tokyo	3.96
3	Beijing	3.27	Tokyo	3.58	New York	3.51	London	3.22
4	Shanghai	3.27	Hong Kong	3.51	Singapore	3.48	Hong Kong	3.12
5	Tokyo	2.87	London	3.31	Beijing	3.07	Beijing	3.05
6	London	2.81	Beijing	2.55	Tokyo	2.70	Dubai	2.78
7	Dubai	2.47	Singapore	2.03	London	2.67	Sydney	2.72
8	Singapore	2.24	Dubai	1.86	Shenzhen	2.34	Sao Paulo	2.54
9	Frankfurt	1.59	Toronto	1.73	Seoul	2.24	Shanghai	1.93
10	Moscow	1.54	Paris	1.71	Mumbai	2.16	Melbourne	1.88
11	Paris	1.45	Chicago	1.68	Dubai	1.78	Singapore	1.80
12	Mumbai	1.38	Frankfurt	1.48	Sydney	1.52	Amsterdam	1.76
13	Amsterdam	1.28	Mumbai	1.37	Paris	1.49	Paris	1.56
14	Seoul	1.21	Sydney	1.32	Taipei	1.47	Washington	1.31
15	Washington	1.15	Boston	1.28	Moscow	1.26	Mumbai	1.29

Table 24 Evaluation on Growth and Development by Respondents From Different Areas

Basically consistent with the logic of the above analysis, survey respondents hold relatively the same opinion on the general trend of growth. No matter on which continents the survey respondents are located, they all favor cities of emerging economies. Ranking of Beijing and Shanghai by survey respondents from Europe respectively rose by one and two places and the two cities rank high. Mumbai is for the first time seen positively by survey respondents from Europe, who ranks it 12<sup>th</sup>, which is higher than Seoul. Survey respondents form America gave higher ranking of Beijing improves by one. Mumbai is mentioned for the first time. Survey respondents from Asia rank Shanghai at the first, Beijing the fifth and Shenzhen the seventh, the same as the previous year. Mumbai ranks the 10<sup>th</sup>, rising one position from last year. Sidney ranks the 12<sup>th</sup>, rising two positions. Moscow is mentioned for the first time.

Rank	Europ	e	North Ame	erica	Asia		Other Conti	nents
Rank	City	Score	City	Score	City	Score	City	Score
1	New York	3.97	New York	5.96	New York	5.69	New York	4.59
2	London	3.58	London	4.01	London	4.47	Tokyo	3.69
3	Tokyo	2.63	Tokyo	3.78	Tokyo	4.38	London	3.66
4	Hong Kong	2.41	Hong Kong	3.55	Hong Kong	3.97	Sydney	2.90
5	Frankfurt	2.20	Shanghai	2.47	Singapore	3.33	Hong Kong	2.75
6	Paris	1.89	Chicago	2.32	Shanghai	3.19	Beijing	2.30
7	Singapore	1.76	Toronto	2.20	Paris	2.35	Melbourne	2.22
8	Zurich	1.72	Singapore	2.09	Beijing	1.96	Sao Paulo	2.16
9	Beijing	1.70	Beijing	2.03	Washington	1.73	Dubai	2.12
10	Geneva	1.70	Frankfurt	2.02	Frankfurt	1.70	Paris	1.92
11	Shanghai	1.63	Paris	1.91	Chicago	1.67	Shanghai	1.70
12	Dubai	1.60	San Francisco	1.33	Seoul	1.52	Washington	1.69
13	Munich	1.51	Boston	1.32	Sydney	1.24	Frankfurt	1.63
14	Amsterdam	1.47	Sydney	1.31	Shenzhen	1.20	Singapore	1.59
15	Washington	1.46	Washington	1.14	Osaka	1.00	Amsterdam	1.39

Table 25 Evaluation on Industrial Support by Respondents From Different Areas

In terms of industrial support, survey respondents from different continents reached consensus on eight cities to enter the global top 15 and meanwhile, they all believed that New York, Tokyo, and London are the three most competent cities in terms of industrial support, which shows that survey respondents from different regions hold certain similar ideas on the cities with strong industrial support, though a degree of regional subjectivity exists on the valuation.

Dank	Europe		North Ame	rica	Asia		Other Contir	nents
Rank	City	Score	City	Score	City	Score	City	Score
1	London	3.69	New York	5.68	New York	5.73	New York	4.41
2	New York	3.61	London	4.19	London	4.83	Sydney	3.46
3	Paris	2.46	Tokyo	3.31	Tokyo	4.53	London	3.26
4	Frankfurt	2.08	Hong Kong	2.88	Hong Kong	4.14	Melbourne	2.90
5	Geneva	2.04	Toronto	2.58	Singapore	3.64	Tokyo	2.87
6	Amsterdam	2.00	Paris	2.29	Paris	2.66	Hong Kong	2.26
7	Zurich	1.98	Chicago	2.01	Shanghai	2.08	Paris	2.22
8	Tokyo	1.91	Singapore	1.94	Frankfurt	1.77	Washington	1.95
9	Stockholm	1.84	Vancouver	1.79	Washington	1.66	Dubai	1.66
10	Copenhagen	1.84	San Francisco	1.68	Chicago	1.55	Singapore	1.58
11	Oslo	1.79	Boston	1.63	Sydney	1.43	Amsterdam	1.57
12	Munich	1.76	Sydney	1.60	Seoul	1.37	Sao Paulo	1.43
13	Washington	1.51	Shanghai	1.60	San Francisco	1.13	Beijing	1.29
14	Brussels	1.50	Washington	1.59	Beijing	1.11	Toronto	1.16
15	Vienna	1.49	Frankfurt	1.48	Osaka	1.07	Geneva	1.15

Table 26 Evaluation on Service by Respondents From Different Areas

In terms of service, in the top 15 cities chosen by survey respondents from different continents, only five cities are the same. But all the survey respondents believe that New York, London and Tokyo should enter the top five in terms of service. But big differences exist on the valuation made by survey respondents on cities aside from the above-mentioned three. Obvious regional subjectivity exists. For instance, more survey respondents from Europe picked Zurich; more survey respondents from Asia chose Singapore and Melbourne. Big differences exist on valuation by survey respondents from different continents.

Rank	Europe		North Ame	erica	Asia		Other Contir	nents
nalik	City	Score	City	Score	City	Score	City	Score
1	London	3.45	New York	5.43	New York	5.99	New York	3.82
2	New York	3.35	London	4.11	London	4.99	Sydney	3.76
3	Amsterdam	2.34	Tokyo	2.83	Tokyo	4.15	Melbourne	3.23
4	Paris	2.31	Toronto	2.61	Hong Kong	3.78	Tokyo	2.96
5	Copenhagen	2.14	Hong Kong	2.36	Singapore	3.54	London	2.87
6	Oslo	2.10	Chicago	2.24	Paris	2.83	Amsterdam	2.30
7	Stockholm	2.02	Sydney	1.90	Shanghai	2.25	Paris	2.08
8	Zurich	1.89	Vancouver	1.88	Chicago	1.98	Washington	1.89
9	Frankfurt	1.87	Paris	1.85	Frankfurt	1.86	Hong Kong	1.84
10	Geneva	1.86	San Francisco	1.80	Washington	1.74	Sao Paulo	1.72
11	Brussels	1.78	Singapore	1.78	Sydney	1.49	Dubai	1.58
12	Munich	1.65	Washington	1.78	Beijing	1.26	Zurich	1.37
13	Helsinki	1.64	Frankfurt	1.47	Seoul	1.23	Toronto	1.32
14	Washington	1.50	Geneva	1.44	San Francisco	1.18	Geneva	1.31
15	Tokyo	1.46	Shanghai	1.43	Zurich	1.00	Rome	1.22

Table 27 Evaluation on General Environment by Respondents From Different Areas

In terms of general environment, in the top 15 cities chosen by survey respondents from different continents, only five cities are the same. But all the survey respondents believe that New York, London, and Tokyo should enter the top five in terms of service levels. As with service, big difference exists on the valuation made by survey respondents on cities aside from the above-mentioned three. Obvious regional subjectivity exists. For instance, of the top 15 cities picked by European survey respondents, 12 are European cities and only two are North American cities and one is an Asian city. North American survey respondents chose six North American cities. Survey respondents from Oceania, South America, and Africa chose three cities located on their continents, and Sydney, Melbourne, and Sao Paulo rank second, third and 10<sup>th</sup> respectively.

#### 2. Importance

On the valuation on indicator importance shown by Table 28, obvious divergence exists among survey respondents from different regions. Asian survey respondents think more highly of the five indicators than survey respondents from other continents. Survey respondents from America and Asia attach more importance on the indicator of financial market while survey respondents from Europe and other continents believe that general environment is more importance than other indicators.

	Europe		North A	North America		Asia		Other Continents	
	Scores	Rank	Scores	Rank	Scores	Rank	Scores	Rank	
Financial Market	3.44	5	3.94	1	4.23	1	3.48	5	
Growth and Development	3.49	3	3.86	3	3.95	4	3.57	4	
Industrial Support	3.46	4	3.69	5	3.87	5	3.62	2	
Service	3.52	2	3.78	4	4.07	3	3.62	2	
General Environment	3.57	1	3.93	2	4.18	2	3.71	1	

# (III) Summary

With analysis on indicator valuation and indicator importance valuation of Financial Centers Development, by survey respondents in different occupations and from different regions, we come up with the following conclusions:

(1) Regardless of the occupations and regions of survey respondents, New York, London, Tokyo, and Hong Kong take the first four places in most results both in terms of indicator valuation and indicator importance valuation.

(2) Financial institution staff has a more rational judgment on indicator valuation, while opinions of non-financial institution staff show bigger divergence and made more diverse selections in financial cities as they not only focus on the financial market but also pay attention to other indicators including governance, environment, and service.

(3) Regardless of their regions, survey respondents pay closest attention to growth and development, where they unanimously favor the emerging economies, while they generally prefer the financial centers in America and Europe in terms of their financial markets, general environment, and service levels.

# **III. Objective indicator system and questionnaire**

# (I) Questionnaire on the competitiveness of financial center

# Dear Sir/Madam:

We are doing a research on the competitiveness of international financial centers. 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!

- 1 What is your job title/main area of responsibility?
  - A. President of a company or company partner
  - B. Top-level executives
  - C. Middle Management
  - D. Staff
- 2 In which industry is your organization
  - A. Investment Banking
  - B. Commercial Banking
  - C .Retail Banking
  - D .Insurance
  - E. Asset Management
  - F. Legal Services
  - G. Accounting Services
  - H. Trade Association
  - I. Regulatory Body/Central Bank
  - J. Government
  - K. Research Institute
  - L. Other Please Specify
- 3 In which city is the headquarters of your organization located?
- 4 Approximately how many employees does your organization have worldwide?
  - A fewer than 100
  - B 100 to 500
  - C 500 to 1000
  - D 1000 to 2000

- E 2000 to 5000
- F more than 5000

	1	Amsterdam	2	Vienna	3	Oslo	4	Paris
	5	Budapest	6	Brussels	7	Dublin	8	Frankfurt
Europe	9	Copenhagen	10	Helsinki	11	Lisbon	12	Luxembourg
Luiope	13	London	14	Rome	15	Madrid	16	Milan
	17	Moscow	18	Munich	19	Geneva	20	Stockholm
	21	Zurich						
	22	Boston	23	Buenos Aires	24	Toronto	25	Chicago
America	26	Washington	27	San Francisco	28	Montreal	29	New York
	30	Sao Paulo	31	Vancouver				
	32	Tokyo	33	Osaka	34	Dubai	35	Mumbai
Asia	36	Singapore	37	Beijing	38	Shanghai	39	Shenzhen
	40	Seoul	41	Taipei	42	Hong Kong		
Other	43	Johannesburg	44	Melbourne	45	Sydney		

5 There are 45 cities in the following table:

(1) In terms of scale, stability and maturity, reflecting the development of financial market(including the capital market \foreign exchange market \banking market \ insurance market and so on ), which are the top 10 cities from your perspective ? (write down the city number only to begin with the most excellent one)

(2) In terms of growth and development (including growth of capital market\ city innovation and potential\ growth of economy), which are the top 10 cities from your perspective?

(3) In terms of industrial support (including the business environment support \city conditions\city infrastructure), which are the top 10 cities from your perspective?

(4) In terms of service (including the government service\ intellectual capital\ urban living conditions), which are the top 10 cities from your perspective?

(5) In terms of general environment (including the political environment\ economic environment \ openness), which are the top 10 cities from your perspective?

<sup>6</sup> Please give your comments on the importance of the five aspects in evaluating the

competitiveness of financial centre (tick  $\sqrt{}$  in the corresponding position,"1"=" not very important", "5"=" the most important")

	1	2	3	4	5
Financial market					
Growth and development					
Industrial support					
Service					
General environment					

7 How confident are you that the following cities most representative of BRICS can become global financial centers? (Please rate) ? ("1"="have no confidence" and "10"="have complete confidence")

A. Shanghai

B. Sao Paulo

. . . . . . . . .

C. Mumbai

D Moscow

C Johannesburg

8 Please rate the following BRICS cities on their ability to attract capital and talent. (1 represents no ability to attract, 5 represents great ability to attract)

	Shanghai	Sao Paulo	Mumbai	Moscow	Johannesburg
Capital Consideration: If you are the leader and decision-maker of a large multinational financial institution and you want to provide financial services in the financial centers of the following BRIC countries, what is your rating on their attractiveness?					
Talent Consideration: If you have a chance to work or develop your career in the financial centres of the following BRIC countries, what is your rating on their attractiveness?					

9. Please rate your understanding of the local currencies of the following BRICS cities.

 A.人民币 (CNY, 中国):
 \_\_\_\_\_\_\_\_ Chinese Yuan (CNY, China)

 B.雷亚尔 (REAL, 巴西):
 \_\_\_\_\_\_\_\_ Real (REAL, Brazil)

 C.卢比 (INR, 印度):
 \_\_\_\_\_\_\_\_ Rupee (INR, India)

 D.卢布 (RUB, 俄罗斯):
 \_\_\_\_\_\_\_\_ Ruble (RUB, Russia)

 E.兰特 (ZAR, 南非):
 \_\_\_\_\_\_\_\_ Rand (ZAR, South Africa)

 (1 represents no knowledge, 5 represents absolute familiarity)

10 Do you have any other comments ?

Thank you for your time and cooperation !!

# (II) Objective indicator system

Level-1 Indicator	Level-2 Indicator	Level-3 Indicator	Data Source	Website	
		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	WFE	http://www.world-exchanges.org	
		Trading			
		Total Volume of Stock			
	Capital Market	Futures Trading	WFE	http://www.world-exchanges.org	
		Stock Market's			
		Significance in the	WFE	http://www.world-exchanges.org	
		National Economy			
		Internationalization of			
		Securities Markets	WFE	http://www.world-exchanges.org	
		Foreign Exchange		http://www.world-exchanges.org	
		Derivatives Turnover	WFE		
	Foreign Exchange	Foreign Exchange			
Financial Market	Market	Reserves	pinggu.org	http://www.pinggu.org/bbs	
		Exchange Rate			
		Volatility	MasterCard	http://www.mastercardworldwide.com/insigh	
		Number of Major Bank	The Banker	http://www.thebanker.com	
		Major Bank Assets	The Banker	http://www.thebanker.com	
		Central Bank Assets To			
	Banking Market	GDP	WFE	http://www.world-exchanges.org	
		Bank Assets To GDP	WFE	http://www.world-exchanges.org	
		Insurance Premium	WFE	http://www.world-exchanges.org	
		Growth of Insurance			
	Insurance Market	Premium	WFE	http://www.world-exchanges.org	
		Insurance Services			
		Network	MasterCard	http://www.mastercardworldwide.com/insigh	
Growth and		Growth Rate of New			
Development		Bonds	WFE	http://www.world-exchanges.org	
		Growth Rate of Listed			
	Capital Market Growth	Companies	WFE	http://www.world-exchanges.org	
		Growth Rate of Share			
		Trading	WFE	http://www.world-exchanges.org	
		Five Year Average	Global Urban		
	Economic Growth	Growth Rate of GDP	Competitiveness Project	http://www.gucp.org	
		Three Year Average			
		Growth Rate of			

Innovation Potential         There Year Average Growth Rate of General Bacial Security         UBS         http://www.ubs.com           Innovation Potential         Growth Rate of Taxes and Social Security         UBS         http://www.ubs.com           Innovation Potential         Three Year Average Growth Rate of Densetic Parchasing         UBS         http://www.ubs.com           Innovation Potential         Three Year Average Growth Rate of Densetic Parchasing         UBS         http://www.ubs.com           Innovation Potential         Added Value of High-sch Products to Government R & D         Competitiveness         http://www.cforic.org           Five Year Average Growth Rate of Government R & D         Centre for International Government R & D         Competitiveness         http://www.cforic.org           Five Year Average Growth Rate of Government R & D         Competitiveness         http://www.cforic.org         http://www.cforic.org           Five Year Average Growth Rate of Government R & D         Competitiveness         http://www.cforic.org         http://www.cforic.org           Five Year Average Growth Rate of Government         Competitiveness         http://www.cforic.org         http://www.cforic.org           Innovation Potential Government         Employment in High-fach Browless period Government         Global Urban         http://www.cforic.org           Industrial Support         For Gapta Expenditure Government					
Interval         Price index Growth Rate of Taxes and Social Security         UBS         http://www.ubs.com           Interval         Trive Year. Average Growth Rate of Nomesic Purchasing         UBS         http://www.ubs.com           Interval         Trive Year. Average Growth Rate of Nomesic Purchasing         UBS         http://www.ubs.com           Innovation Outputs         Five Year Average Growth Rate of National Value of National Value of Manufacturing         Centre for International Competitiveness         http://www.cloric.org           Five Year Average Growth Rate of Government R & D         Centre for International Competitiveness         http://www.cloric.org           Five Year Average Growth Rate of Government R & D         Centre for International Competitiveness         http://www.cloric.org           Innovation Potental         Five Year Average Growth Rate of Government R & D         Centre for International Competitiveness         http://www.cloric.org           Innovation Potental         Employment In High-Tech Bervices per 1,000 inhabitants         Global Urban Competitiveness         http://www.cloric.org           People         Strength of Trades an Competitiveness Project         http://www.cloric.org         http://www.cloric.org           People         Government         Global Urban Competitiveness Project         http://www.cloric.org           Business Support         Strength of Trades an Competitiveness Project         http://ww			Three Year Average		
Innovation Potential         Growth Rate of Taxes and Social Security Growth Rate of Domestic Purchasing Poeer         UBS         http://www.ubs.com           Innovation Outputs         Three Year Average Growth Rate of Manufacturing         UBS         http://www.ubs.com           Added Value of High-tech Products to Manufacturing         Centre for International Competitiveness         http://www.cloic.org           Five Year Average Growth Rate of Government R & D         Centre for International Competitiveness         http://www.cloic.org           Five Year Average Growth Rate of Government R & D         Centre for International Competitiveness         http://www.cloic.org           Five Year Average Growth Rate of Government R & D         Centre for International Competitiveness         http://www.cloic.org           Five Year Average Growth Rate of Government R & D         Centre for International Competitiveness         http://www.cloic.org           People         Technology and Innovation Potential         Global Urban Competitiveness         http://www.cloic.org           Per Capita Expenditure on R&D performed by Government         Centre for International Competitiveness         http://www.cloic.org           Business Environment Support         Strength of Traders and Competitiveness Project         http://www.gucp.org           Strength of Traders Competitiveness Project         http://www.gucp.org         http://www.gucp.org           Strength of Traders Competitiveness			Growth Rate of General	UBS	http://www.ubs.com
Innovation Potential Support         Added Value of Manufacturing         UBS         http://www.ubs.com           Innovation Duty         Five Year Average Power         UBS         http://www.ubs.com           Added Value of Added Value of Manufacturing         Centre for International Competitiveness         http://www.ubs.com           Innovation Duty         Five Year Average Growth Reaf of Government R & D         Centre for International Competitiveness         http://www.cloric.org           Growth Reaf of Government R & D         Centre for International Competitiveness         http://www.cloric.org           Five Year Average Growth Reaf of Government R & D         Centre for International Competitiveness         http://www.cloric.org           Innovation Potental         Five Year Average Growth Reaf of Government R & D         Centre for International Competitiveness         http://www.cloric.org           Innovation Potental         Five Year Average Growth Reaf of Government In Migh-Tech Services per 1,000 inhabitants         Centre for International Competitiveness         http://www.cloric.org           Per Capita Expenditure on R&D performed by Government         Centre for International Competitiveness         http://www.cloric.org           Strength of Trafers and Support         Global Urban Competitiveness Project         http://www.cloric.org           Strength of Trafers and Strength of High-Tech         Global Urban Competitiveness Project         http://www.gucp.org			Price Index		
Innovation Outputs         The Year Average Growth Rate of Domestic Purchasing         UBS         http://www.ubs.com           Innovation Outputs         Flav Year Average Growth Rate of High-tech Products to Added Value of Added Value of Added Value of Added Value of Growth Rate			Growth Rate of Taxes		
Innovation Output         Growth Rate of Domestic Purchasing Added Value of High-tech Products to Added Value of High-tech Products to Added Value of High-tech Products to Centre for International Competitiveness         http://www.cforic.org           Innovation Output         Five Year Average Growth Rate of Gevernment R & D         Centre for International Competitiveness         http://www.cforic.org           Five Year Average Growth Rate of Gevernment R & D         Centre for International Competitiveness         http://www.cforic.org           Five Year Average Growth Rate of Gevernment R & D         Centre for International Competitiveness         http://www.cforic.org           Five Year Average Growth Rate of Gevernment R & D         Centre for International Competitiveness Project         http://www.cforic.org           Innovation Potental Innovation Potental Employment In High-Tech Services project         Centre for International Competitiveness         http://www.cforic.org           Per Capita Expenditure on R&D performed by Government         Centre for International Competitiveness         http://www.cforic.org           Industrial Support         Strength of Manufactures         Centre for International Competitiveness Project         http://www.cforic.org           Strength of ITades and Support         Global Urban Retailers         Competitiveness Project         http://www.gucp.org           Strength of ITades and Support         Global Urban Retailers         Global Urban Competitiveness Project         http://www.gucp.org </th <th></th> <th></th> <th>and Social Security</th> <th>UBS</th> <th>http://www.ubs.com</th>			and Social Security	UBS	http://www.ubs.com
Innovation Output         Growth Rate of Domestic Purchasing Added Value of High-tech Products to Added Value of High-tech Products to Added Value of High-tech Products to Competitiveness         Centre for International Competitiveness         http://www.doiric.org           Innovation Output         Five Year Average Growth Rate of Gevernment R & D Growth Rate of Growth Rate of Gro			Three Year Average		
Innovation Outputs         Densitic Purchasing Power         UBS         http://www.dbs.com           Added Value of High-tech Products to deded Value of Manufacturing         Competitiveness         http://www.cfoic.org           Innovation Outputs         Five Year Average Growth Rate of Government R & D Exponditures         Competitiveness         http://www.cfoic.org           Five Year Average Growth Rate of Government R & D Exponditures         Competitiveness         http://www.cfoic.org           Five Year Average Growth Rate of Government R & D People         Competitiveness         http://www.cfoic.org           Innovation Potental         Technology and Innovation         Global Urban Competitiveness         http://www.cfoic.org           Innovation Potental         Five Year Average Growth Rate of Government R & D People         Centre for International Competitiveness         http://www.gucp.org           Innovation Potental         High-Tech Services per Government         Centre for International Competitiveness         http://www.gucp.org           Industrial Support         Strength of Manufacturers         Centre for International Competitiveness Project         http://www.gucp.org           Industrial Support         Strength of Traders an Rataliors         Global Urban Competitiveness Project         http://www.gucp.org           Strength of High-foch Companies         Global Urban Competitiveness Project         http://www.gucp.org			_		
Innovation Outputs         Power         Centre for international Competitiveness         http://www.clotic.org           Innovation Outputs         Five Year Average Growth Rate of Competitiveness         Centre for international Competitiveness         http://www.clotic.org           Five Year Average Growth Rate of Competitiveness         Centre for international Competitiveness         http://www.clotic.org           Five Year Average Growth Rate of Competitiveness         Centre for international Competitiveness         http://www.clotic.org           Innovation Potential Innovation Potential Innovatin Potential Innovat				UBS	http://www.ubs.com
Innovation Outputs         Added Value of High-lech Products to Added Value of Mandacturing         Centre for international Competitiveness         http://www.cforic.org           Innovation Outputs         Five Year Average Growth Rate of Government R & D         Centre for international Competitiveness         http://www.cforic.org           Five Year Average Growth Rate of Government R & D         Centre for international Competitiveness         http://www.cforic.org           Five Year Average Growth Rate of Government R & D         Centre for international Competitiveness         http://www.cforic.org           Innovation Potental         Technology and Innovation Potental         Global Urban Competitiveness         http://www.cforic.org           Innovation Potental         High-Tech Services per 1,000 inhabitants         Centre for international Competitiveness         http://www.cforic.org           Per Capita Expenditure on R&D performed by Government         Centre for International Competitiveness         http://www.cforic.org           Strength of Traders and Retailers         Global Urban Competitiveness Project         http://www.gucp.org           Strength of Traders and Competitiveness Project         http://www.gucp.org         http://www.gucp.org           Strength of Financial Services Providers         Global Urban Competitiveness Project         http://www.gucp.org			_		
Innovation Output     High-tech Products to Added Value of Manufacturing     Competitiveness     http://www.cforic.org       Five Year Average Goverment R & D     Centre for International Goverment R & D     http://www.cforic.org       Five Year Average Goverment R & D     Centre for International Goverment R & D     http://www.cforic.org       Five Year Average Goverment R & D     Centre for International Goverment R & D     http://www.cforic.org       Five Year Average Goverment R & D     Centre for International Competitiveness     http://www.cforic.org       People     Centre for International Goverment R & D     Centre for International Competitiveness     http://www.cforic.org       People     Technology and Innovation Potential     Centre for International Competitiveness     http://www.glucp.org       People     Employment in 1,000 inhabitants     Centre for International Competitiveness     http://www.glucp.org       Per Capita Expenditure on R&D performed by Government     Global Urban Competitiveness Project     http://www.glucp.org       Strength of Traders and Retailers     Global Urban Competitiveness Project     http://www.gucp.org       Strength of High-Tech Companies     Global Urban Competitiveness Project     http://www.gucp.org       Strength of Financial Services Provider     Global Urban Competitiveness Project     http://www.gucp.org					
Innovation Outputs         Added Value of Manufacturing         Competitiveness         http://www.cforic.org           Five Year Average Government R & D         Centre for International Competitiveness         http://www.cforic.org           Five Year Average Government R & D         Centre for International Competitiveness         http://www.cforic.org           Five Year Average Government R & D         Centre for International Competitiveness         http://www.cforic.org           Five Year Average Government R & D         Centre for International Competitiveness         http://www.cforic.org           Innovation Potental         Technology and Innovation         Global Urban Competitiveness         http://www.cforic.org           People         For Capita Expenditure on R&D performed by Government         Centre for International Competitiveness         http://www.cforic.org           Industrial Support         Strength of Manufacturers         Centre for International Competitiveness         http://www.cforic.org           Business Environment Support         Strength of Traders and Retailers         Global Urban Competitiveness Project         http://www.gucp.org           Strength of High-Tech Companies         Competitiveness Project         http://www.gucp.org           Strength of Financial Services Providers         Competitiveness Project         http://www.gucp.org					
Innovation Outputs         Manufacturing Growth Rate of Government R & D Expenditures         Centre for International Competitiveness         http://www.cforic.org           Five Year Average Growth Rate of Government R & D People         Centre for International Competitiveness         http://www.cforic.org           Five Year Average Growth Rate of Government R & D People         Centre for International Competitiveness         http://www.cforic.org           Innovation Potential Innovation Potential         FeroPople         Global Urban Competitiveness         http://www.cforic.org           Innovation Potential Innovation Potential         Employment in High-Tech Services per (1000 Inhabitants)         Centre for International Competitiveness         http://www.cforic.org           Per Capita Expenditure Government P         Centre for International Competitiveness         http://www.cforic.org           Strength of Retailers         Global Urban Competitiveness Project         http://www.cforic.org           Strength of Traders and Competitiveness Project         http://www.gucp.org           Strength of Traders and Competitiveness Project         http://www.gucp.org           Strength of Traders and Competitiveness Project         http://www.gucp.org           Strength of Financial Support         Global Urban Competitiveness Project         http://www.gucp.org           Strength of Financial Competitiveness Project         http://www.gucp.org			-		http://www.cforic.org
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	Basic Urban	Geographical Location	Global Urban Competitiveness Project	http://www.gucp.org
	Conditions	City Population Density	wikipedia	http://en.wikipedia.org/wiki/Population_density
		Cost of Renting Office	UBS	http://www.ubs.com
		Cargo Throughput	Global Urban Competitiveness Project	http://www.gucp.org
	Urban Infrastructure	Airline carriers	Global Urban Competitiveness Project	http://www.gucp.org
		IT Infrastructure	World Economic Forum	http://www.weforum.org
	Government Service	Services Employment Proportion	Global Urban Competitiveness Project	http://www.gucp.org
Service		Government Response Capability Index	Global Urban Competitiveness Project	http://www.gucp.org
		Digital Governance	Global E-Government Development Report	http://www2.unpan.org/egovkb/global_reports/0 report.htm
	Intellectual Capital	Financial Services Employment Percentage	Global Urban Competitiveness Project	http://www.gucp.org
		Per Capita Public Expenditures on Higher Education	Centre for International Competitiveness	http://www.cforic.org
		Population Education	Global Urban Competitiveness Project	http://www.gucp.org
		Number of Universities	Global Urban Competitiveness Project	http://www.gucp.org
		Per Capita GDP	Global Urban Competitiveness Project	http://www.gucp.org
		Cost of Living	Global Urban Competitiveness Project	http://www.gucp.org
	Urban Living	Quality of Living Index	Mercer HR	http://www.mercerhr.com
	Conditions	Unemployment Rate Index	Centre for International Competitiveness	http://www.cforic.org
		Crime Statistics	Global Urban Competitiveness Project	http://www.gucp.org
		Ease of Doing Business	World Bank	http://www.doingbusiness.org/economyranking
General Environment		Total Foreign Trade Volume	CIA-The world facebook	https://www.cia.gov/library/publications/the-wor -factbook/

Economic	Consumer Price Index	IMF	http://www.imf.org
Environment	Economic Freedom Index	Fraser Institute	http://www.freetheworld.com/release.html
	Economic Extrovert Degree	World Economic Forum	http://www.weforum.org
Political	Happiness Planet Index	NEF	http://neweconomics.org/
	Political Risk Index	Exclusive Analysis Ltd	http://www.exclusive-analysis.com
Environment	Corruption Index	Transparency International	http://www.transparency.org
	Social Globalization	KOF-Index of Globalization	http://globalization.kof.ethz.ch
	Networked Readiness Index	World Economic Forum	http://www.weforum.org
Openness	Global Competitiveness Index	World Economic Forum	http://www.weforum.org
	Foreign Direct Investment	UNCTAD	http://www.unctad.org

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#### Xinhua-Dow Jones IFCD Index Report Feedback

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Note: To improve the quality of report, provide more accurate and objective evaluation, we sincerely invite you to give us your views and ideas, please put your needs and suggestions, thank you very much.

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