

GLOBAL POWER CITY INDEX 2013

Summary





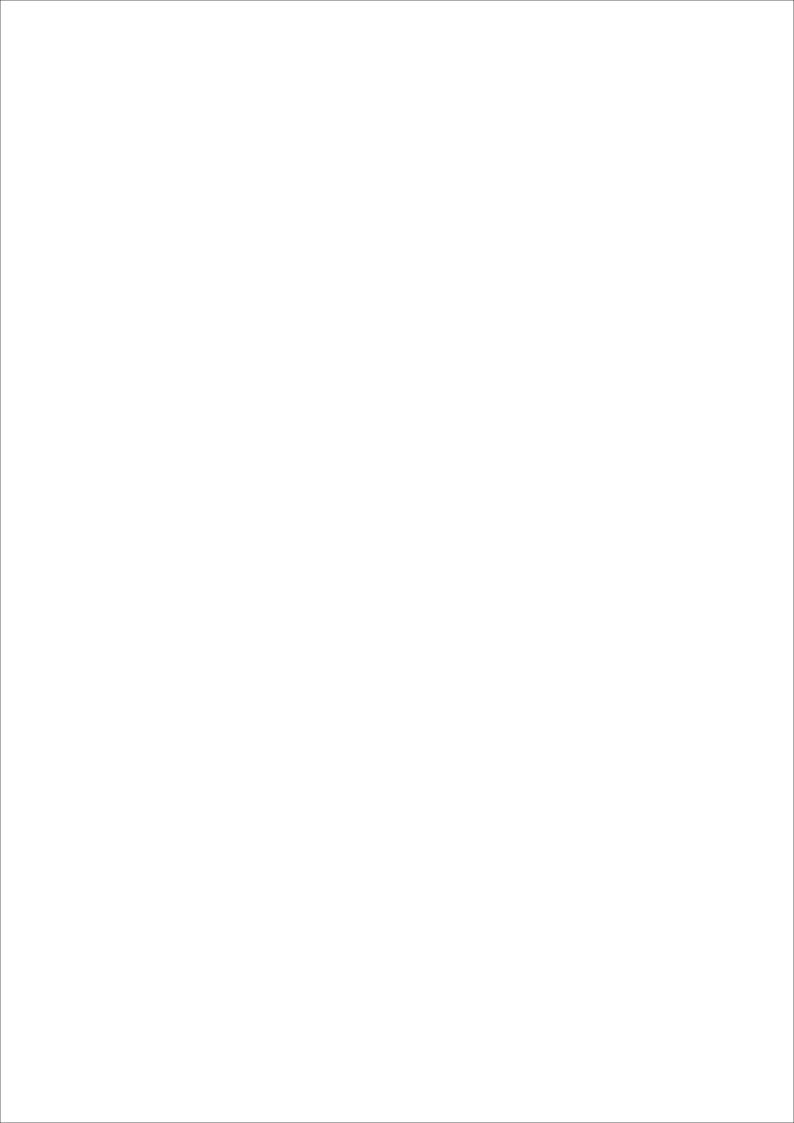






October 2013

Institute for Urban Strategies
THE MORI MEMORIAL FOUNDATION



Preface

Considering the fierce global competition between cities, the Global Power City Index (GPCI) evaluates and ranks the major cities of the world according to their 'magnetism,' ie. their comprehensive power to attract creative people and business enterprises from around the world.

Since the release of the first Global Power City Index in 2008, the Institute for Urban Strategies at The Mori Memorial Foundation has been actively promoting its findings worldwide via the media and its website. This has led to numerous invitations to present at international symposiums in the U.S., China, South Korea and many other countries. The GPCI's findings have been well-received within the international community, stimulating active discussion and creating the opportunity to share ideas with the world's leading research institutes on the topic of urban competition.

The 2013 edition of the Global Power City Index includes data from newly conducted surveys on the residents of all the cities included in the index to reflect most recent trends. A careful review of the data of some indicators was also performed.

In addition, every effort was made to assess the 'Intangible Urban Value' of cities, a new value that will affect the urban power of a city in the future and which appeals to human sensitivities such as efficiency, accuracy, speed, cleanliness and security and safety of urban management, rather than just the city's physical aspects.

It is hoped that these results will provide a benchmark in better understanding the strengths and weaknesses that Tokyo and other global cities possess, while offering a valuable resource to the public sector in the development of urban policy planning and private sector corporate strategies.

*Currently scheduled for publication, the 'GPCI YEAR BOOK 2013' includes more detailed data from indicators and analyses by city

Features of the Global Power City Index (GPCI)

- 1. The GPCI is the first attempt made by a research institute in Japan to analyze and rank the comprehensive power of the world's major cities.
- 2.As opposed to limiting the ranking to particular areas of research such as 'Finance' and 'Livability,' the GPCI focuses on a wide variety of functions in order to assess and rank the global potential and comprehensive power of a city.
- 3. Forty of the world's leading cities were selected and their global comprehensive power evaluated based on the following viewpoints; six main functions representing city strength (Economy, Research and Development, Cultural Interaction, Livability, Environment and Accessibility), four global actors who lead the urban activities in their cities (Manager, Researcher, Artist and Visitor) as well as one local actor (Resident), thus providing an all-encompassing view of the cities.
- 4. The challenges that Tokyo must address in order to overcome the weaknesses revealed by this survey have been clarified.
- 5. This ranking has been produced with the involvement of Professor Sir Peter Hall, a global authority in Urban Studies, as well as other academics in this field. It has been peer reviewed by third parties, all international experts from both the public and private sectors.

Findings of the GPCI-2013

Key Messages

- ◆ London's **Livability** score has fallen, but due to increases in other functions, the city ultimately continues to be ranked No.1, further widening the gap in overall score from last year with 2nd place New York.
- ◆ Tokyo maintains its No.4 position and has closed the gap with 3rd ranked Paris, but its gap with London No.1 and New York No.2 has grown. At the same time, the gap between Tokyo and Singapore, in 5th position, has shrunk.
- ◆ Led by Frankfurt, EU cities are showing signs of a recovery, while scores and rankings of North American cities are also on the rise.
- ◆ The score increase in **Economy** of the two Chinese cities still stands out, particularly for Beijing. Shanghai's scores in **Cultural Interaction** and **Accessibility** have increased and the city is now placed 12th, ahead of Beijing in the comprehensive ranking.

1.Overall Trends

As with last year, <u>London</u>, <u>New York</u>, <u>Paris and Tokyo are ranked as the top four cities</u> respectively in the 2013 GPCI comprehensive rankings.

London's **Livability** score has been lowered, but due to increased scores in **Economy**, **Research** and **Development** and **Environment**, the overall score difference between London and New York has widened. Paris and Tokyo have seen a significant decrease in their scores and the gap between them and 2nd place has grown larger, while the score difference between 4th placed Tokyo and 5th placed Singapore has shrunk. Looking only at the relationship between Tokyo and Paris, the difference in score has shrunk from last year and the possibility has emerged that Tokyo could move into 3rd place on the back of the announcement that the city will play host to the Olympic Games.

As for trends in comprehensive rankings for cities placed 5th and lower, 6th placed Seoul has largely closed the gap on Singapore at No.5, while Frankfurt and Vienna have risen in the rankings. In particular, Frankfurt's scores for **Environment** and **Accessibility** increased, which contributed to a move in comprehensive ranking from 12th to 10th.

Meanwhile, there has been marked growth in **Economy** for both of the Chinese cities. More specifically, in **Economy**, Beijing is still ranked No.3 but its score has risen while scores for the cities ranked 1st and 2nd have seen a major decline. Despite trailing Beijing in **Economy**, Shanghai's scores for **Cultural Interaction** and **Accessibility** have risen significantly and the city has overtaken Beijing, in 14th place, to be now ranked 12th in the comprehensive rankings.

2.Function-Specific Ranking

Economy: As with last year, Tokyo is again ranked No.1, but as some indicators were affected by previous strong phases in the Japanese yen, Tokyo only appears to be maintaining its position at the top. In contrast, Beijing at No.3 has recorded a high score for World's Top 300 Companies and closed the gap on New York in 2nd place. Seoul has moved up from 13th place last year to No.8 this year. This is due to increased scores for Wage Level and Level of Political, Economic and Business Risk.

Research and Development: No major changes have taken place in rankings and scores, but Los Angeles has moved up from No.6 last year to No.4.

Cultural Interaction: Continuing on from last year, London has recorded a considerable gap against New York and maintains its top position. Indicator scores based on surveys on Level of Satisfaction for Dining and Level of Satisfaction for Shopping etc. have risen for Shanghai, which jumps from 22nd to 16th in this function.

Livability: Due to the effects of the weak US dollar last year, scores for Price Level and Average House Rent have fluctuated considerably in some cities. Scores for London, New York and Tokyo have fallen, but of the top four cities only Paris has achieved a high score and as a result maintains its top position.

Environment: Tokyo maintains its No.1 position from last year and there have been no changes in the top five positions. Frankfurt has improved from No.10 last year to No.6 with a particular increase in its score for Percentage of Renewable Energy Used.

Accessibility: Frankfurt has climbed from No.6 to No.3. The city has recorded high scores for *Number of Cities with Direct International Flights* and *Number of Cities with Direct International Freighter Flights*.

3.Actor-Specific Ranking

Manager: China's two cities have climbed higher in the rankings from last year with Shanghai and Beijing taking 3rd and 4th places respectively, while Tokyo has slipped from 7th to 9th.

Researcher: In addition to Los Angeles jumping from 7th last year to 5th and surpassing Boston, Osaka has risen from 17th to 13th.

Artist: New York has earned a good score in "Cultural Stimulation" and improved from 5th to 2nd.

Visitor: With relative rating decreases for "Dining (Variety of Cuisines, Prices, etc.)" and "Shopping (Environment, Prices, Attractiveness, etc.)" Tokyo has slipped from 6th position to 9th.

Resident: As a result of lower scores for Tokyo, Osaka, Fukuoka and some North American cities for "Environment to Purchase Goods (Prices and Easiness to Get Products)," <u>multiple EU cities have moved</u> up in ranking.

4.Intangible Urban Value

From the perspective of actors that play active roles in cities, <u>urban attractiveness is not necessarily limited to just physical elements</u>. It is thought that being able to evoke feelings of comfort, excitement or pride in a city's residents is due to the fact that <u>all cities have the 'power to appeal to human sensitivity.'</u>
Accordingly, this power has been defined as <u>Intangible Urban Value</u> and is an attempt to evaluate and portray from a fresh viewpoint the future urban power of 10 cities in the GPCI, namely, Barcelona, London, Paris, Vienna, Istanbul, Singapore, Beijing, Seoul, Tokyo and New York.

As part of the framework for conducting new evaluations from the perspective of Intangible Urban Value, the Quantitative and Qualitative Characteristics of a city have been established with the three elements of Spatial Setting, Activities and Spatial Management, while the Sense of Values of a city have been established with the three elements of Universal Value, Regional and Cultural Value and Individual Value. Analyses were then performed based on this framework.

Analyses were applied to some of the indicator groups in the GPCI by contrasting the GPCI evaluation axis with the Intangible Urban Value evaluation axis.

As a result, for example, in the GPCI indicator group of "International Transportation Network," <u>despite</u> not having the best international flight network, compared with other major global cities Tokyo has a high score for the **Intangible Urban Value** of *Flight On-time Rate* and demonstrates superior management capabilities, which indicates that there is a new value that cannot be assessed solely by the physical aspects of a city.

1.GPCI-2013 Methodology

1-1

GPCI-2013 Research Organization

This ranking is created under the GPCI Committee, comprised of five members, including Sir Peter Hall, Professor at The Bartlett University College London as Principal Advisor, and Heizo Takenaka, Chairman of Institute for Urban Strategies, The Mori Memorial Foundation, Professor at Keio University and Director of the Global Security Research Institute, as Chairman. The Committee provides supervision of the ranking creation process at key points.

The Working Group, headed by Hiroo Ichikawa, Executive Director of The Mori Memorial Foundation, Professor and Dean of the Graduate School of Governance Studies at Meiji University, as its Principal, performed the necessary research and analysis in order to create the rankings for the cities, and sought advice from expert partners worldwide regarding the perspective of global actors to help in the creation of the ranking.

In order to ensure the impartiality of the ranking creation process and its results, a third-party peer review is undertaken to validate the contents and provide suggestions for improvement.

The GPCI-2013 has been created under the organization shown below.



1-2 Cities for GPCI-2013



Region	City
Europe	Madrid, Barcelona, London, Paris, Brussels, Amsterdam, Geneva, Frankfurt, Berlin, Zurich, Milan, Copenhagen, Vienna, Stockholm, Istanbul, Moscow
Africa	Cairo
Asia	Mumbai, Bangkok, Kuala Lumpur, Singapore, Hong Kong, Beijing, Shanghai, Taipei, Seoul, Fukuoka, Osaka, Tokyo
Oceania	Sydney
North America	Vancouver, San Francisco, Los Angeles, Chicago, Toronto, Washington, D.C., New York, Boston
Latin America	Mexico City, Sao Paulo

The Criteria for Selection

- Cities found in the top ten of existing, influential city rankings (The Global Financial Centres Index, Worldwide Centers of Commerce Index and Cities of Opportunity)
- Major cities of countries which are in the top ten in terms of competition according to influential international competiveness rankings (created by World Economic Forum, and International Institute for Management Development)
- Cities which do not meet the above criteria but which are deemed appropriate for inclusion by the GPCI committee or its working group members.

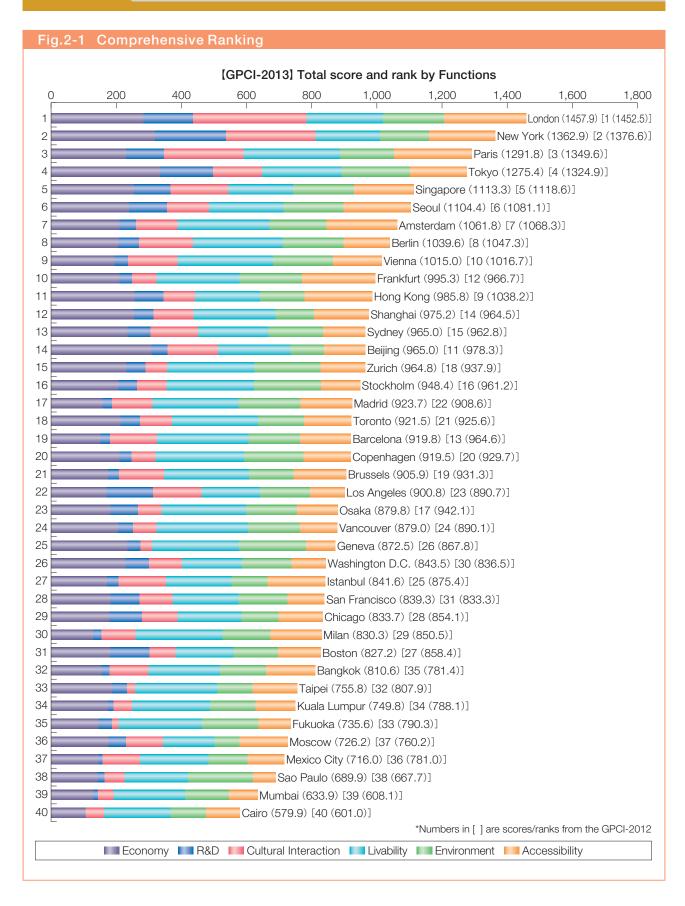
1-3 The Ranking Creation Method

Fig.1	-3 Cre	eation Flow for Function-	-based Ranking
		Function	Indicator Group Indicato
			Market Size 2
			Market Attractiveness 2
		Foonomy	Economic Vitality 2
		Economy	Human Capital 2
			Business Environment 3
			Regulations and Risks 2
		Research and	Academic Resources 2
		Development	Research Background 3
C			Research Achievement 3
omp			Trendsetting Potential 3
<u>ore</u>			Cultural Resources 3
nen		Cultural	Facilities for Visitors — 3
Siv.		Interaction	Attractiveness to Visitors 4
Comprehensive Ranking			Volume of Interaction 3
nkir			Working Environment 3
Di			Cost of Living 2
		Livability	Security and Safety2
			Living Environment — 3
			Living Facilities — 4
			Ecology 3
		Environment	Pollution — 3
		Liviloninent	Natural Environment 3
			International Transportation Network — 2
			Infrastructure of International Transportation 2
		Accessibility	Transportation Service of Inner-city 3
			Traffic Convenience 3
	-		Total 70 Indicators

Fig.1-4 Flow of Creation for Actor-Specific Ranking **Actor** Manager Visitor Researcher **Artist** Resident Important Factors Demanded by Each Actor 1.Qualities of Research 1.Accumulation of 1.Cultural Stimulation 1.Environment to Purchase Goods Enterprises and Business Deals Attractiveness and Opportunities for Interaction 2.Public Safety (Prices and Easiness to Get Products) Institutions, 2.Potential of Business Growth Researchers and Directors 3.Accumulation of Art Markets 2.Environment for Daily Life (Ease of Living) 2.Accumulation of 3.Ease of Doing Business 3.Richness in Tourist Spots Research Institutions & 4.Environment for Creative Activities (Studio Rent and 4.High-class Accommodations 4.Business 3.Work
Environment
(Income and
Employment
Opportunities) Researchers Environment 3. Opportunities that 5.Dining (Variety of Cuisines, Prices etc.) Spaces) 5.Richness in Stimulate Researchers In 5.Environment for Daily Life (Ease of Living) Human Resources Conducting Academic 6.Shopping
(Environment,
Prices,
Attractiveness
etc.) 6.Accumulation of Industry to Support Business Activities 4.Readiness for Accepting Researchers (Research Funding, Support with Living Expenses etc.) 5.Leisure Activities 7.Favorable 6.Public Safety Environment for 7.Mobility (Travel Time and Fares to Destinations) 7.Quality of Medical Treatment Employees and their Families 8.Political and Economic Risk, and Disaster Vulnerability 5.Career Opportunities for Researchers 6.Environment for Daily Life (Ease of Living) 2 2 5 **Economy** 13 Research & 2 7 2 Development Cultural **Function** 7 12 7 7 7 Interaction 12 9 8 6 12 Livability 8 6 5 5 **Environment** 9 4 2 8 5 Accessibility 24 26 indicators indicators indicators indicators indicators Researcher Manager **Artist** Visitor Resident Score Score Score Score **Score** Actor - Specific Ranking

2.GPCI-2013 Results

2-1 Function-Specific Comprehensive Ranking



2-2 Function-Specific Ranking

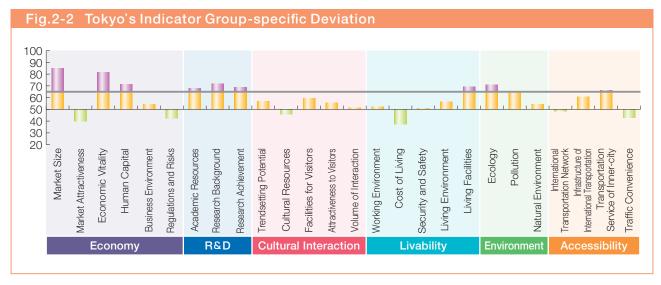
Rank	Total Score	ore	Economy	>	R&D		Cultural Interaction	action	Livability	<u>></u>	Environment	ent	Accessibility	ξ
Lon	London	1457.9	Tokyo	335.0	New York	218.9	London	348.0	Paris	295.6 Tokyo	Tokyo	208.9	London	252.2
Nev	New York	1362.9	New York	319.5	Tokyo	162.7	New York	273.8	Vienna	293.0	Stockholm	205.3	Paris	240.8
Paris		1291.8	Beijing	309.4	London	152.7	Paris	243.9	Amsterdam	283.1	Geneva	203.4	Frankfurt	225.6
Tokyo		1275.4	London	284.2	Los Angeles	142.6	Singapore	178.5	Barcelona	281.5	Zurich	200.3	Amsterdam	217.6
Sing	Singapore	1113.3	Hong Kong	257.0	Boston	121.8	Berlin	166.2	Vancouver	281.2	Sao Paulo	197.1	Hong Kong	209.4
Seoul		1104.4	Singapore	255.9	Seoul	117.2	Beijing	155.0	Berlin	275.0	Frankfurt	190.6	Seoul	208.2
Ams	Amsterdam	1061.8	Shanghai	254.5	Paris	116.6	Vienna	151.9	Copenhagen	271.6	Madrid	189.1	New York	204.3
Berlin		1039.6	Seoul	240.0	Singapore	110.8	Tokyo	150.3		268.9	Singapore	186.8	Singapore	183.7
Vienna		1015.0	Sydney	235.6	Chicago	100.0	Los Angeles	148.9	Stockholm	268.1		186.3	Istanbul	178.6
Fra	Frankfurt	995.3	Geneva	234.8	Hong Kong	89.5	Istanbul	146.4	Geneva	268.1	Berlin	184.5	Tokyo	174.6
Hor	Hong Kong	985.8	Zurich	232.5	San Francisco	88.6	Sydney	145.7	Milan	266.4	Vienna	182.0	Shanghai	168.5
Sha	Shanghai	975.2	Paris	231.0	Osaka	83.6	Barcelona	143.4	Toronto	264.2	Seoul	181.6	Brussels	163.0
Syd	Sydney	965.0	Washington D.C.	229.4	Washington D.C.	71.4	Brussels	137.5	Madrid	263.5	Copenhagen	180.7	Madrid	159.3
Beijing	ing	965.0	Toronto	214.3	Sydney	70.3	Seoul	128.3	Brussels	261.4	Fukuoka	173.1	Milan	157.4
Zurich	ich	964.8	Amsterdam	211.2	Berlin	63.3	Amsterdam	127.0	Osaka	259.5	Amsterdam	172.5	Barcelona	156.9
Sto	Stockholm	948.4	Frankfurt	210.4	Shanghai	0.09	Shanghai	123.9	Fukuoka	254.9	Sydney	165.6	Bangkok	151.5
Madrid	drid		Copenhagen	210.3	Toronto	58.8	Madrid	123.9	Frankfurt	254.4	Paris	163.9	Vienna	150.6
Torc	Toronto	921.5	Berlin	207.6	Zurich	57.9	Bangkok	120.8	Taipei	254.0	Vancouver	158.7	Moscow	149.0
Bar	Barcelona	919.8	Stockholm	207.4	Stockholm	57.1	Mexico City	114.1	Shanghai	250.5	Barcelona	155.8	Toronto	145.9
Cop	Copenhagen	919.5	Vancouver	205.5	Moscow	53.5	Moscow	113.2	Tokyo	243.9	Osaka	154.5	Copenhagen	145.5
Bru	Brussels	905.9 Vienna	Vienna	196.2	Amsterdam	50.3	Chicago	109.6	Kuala Lumpur	239.1	239.1 Los Angeles	151.9	Berlin	143.2
Los	Los Angeles	900.8	Taipei	188.1	Beijing	49.0	Milan	105.7	London	234.5	Washington D.C.	150.0	Zurich	139.0
Osaka	ıka	879.8	San Francisco	183.8	Vancouver	46.4	Washington D.C.	102.2	Seoul	229.1	New York	148.5	Taipei	138.8
Van	Vancouver	879.0	Osaka		Taipei	45.9	San Francisco	100.9	Beijing	222.7	San Francisco	148.1	Chicago	136.2
Ger	Geneva	872.5	Boston	181.7	Vienna	41.4	Toronto	98.4	Mumbai	219.6	Milan	145.9	Boston	131.8
Wash	Washington D.C.	843.5	Chicago	179.8	Geneva	40.8	Hong Kong	96.3	Bangkok	218.4	Bangkok	140.4	Sydney	130.7
Ista	Istanbul	841.6	Moscow	177.4	Fukuoka	40.1	Stockholm	90.3	Sydney	217.1	Toronto	139.8	Beijing	128.5
San	San Francisco	839.3	839.3 Kuala Lumpur	174.9	Frankfurt	38.5	Boston	80.0	Mexico City	210.2	Kuala Lumpur	137.0	Osaka	125.6
Chi	Chicago	833.7	Brussels	174.9	Copenhagen	36.8	Frankfurt	75.8	Cairo	205.0	Boston	134.8	Kuala Lumpur	123.9
Milan	ЯП	830.3	830.3 Istanbul	172.4	Brussels	35.0	Copenhagen	74.7	San Francisco	202.8	Brussels	134.1	Stockholm	120.1
Bos	Boston	827.2	Los Angeles	171.4	Istanbul	34.6	Osaka	73.2	Istanbul	200.9	Hong Kong	133.6	Vancouver	115.3
Ban	Bangkok	810.6	810.6 Madrid	158.1	Barcelona	30.5	Vancouver	72.0	Hong Kong	200.0	200.0 Mumbai	133.6	San Francisco	115.1
Taipei)ei	755.8	Bangkok	155.8	Madrid	29.9	Zurich	66.3		197.9	Mexico City	119.4	Mexico City	113.3
Kua	Kuala Lumpur	749.8	Barcelona	151.7	Milan	26.3	Sao Paulo	61.7	Singapore	197.7	Shanghai	117.6	Los Angeles	106.7
Fuk	Fukuoka	735.6	Fukuoka	146.9	Bangkok	23.6	Kuala Lumpur	57.2	Chicago	195.2	Chicago	112.8	Washington D.C.	106.3
Mos	Moscow	726.2	Mexico City	146.6	Sao Paulo	21.3	Cairo	56.2	Sao Paulo	194.5	194.5 Istanbul	108.6	Cairo	105.9
Me	Mexico City	716.0	Sao Paulo	143.8	Kuala Lumpur	17.7	Mumbai	49.0	Washington D.C.	184.2	Cairo	106.4	Fukuoka	99.1
Sao	o Paulo	689.9	689.9 Mumbai	131.6	Mumbai	12.4	Geneva	34.2	Los Angeles	179.2	Taipei	105.1	Geneva	91.2
Mur	Mumbai	633.9 Milan	Milan	128.7	Mexico City	12.4	Taipei	23.9	Boston	177.0	Beijing	100.3	Mumbai	87.8

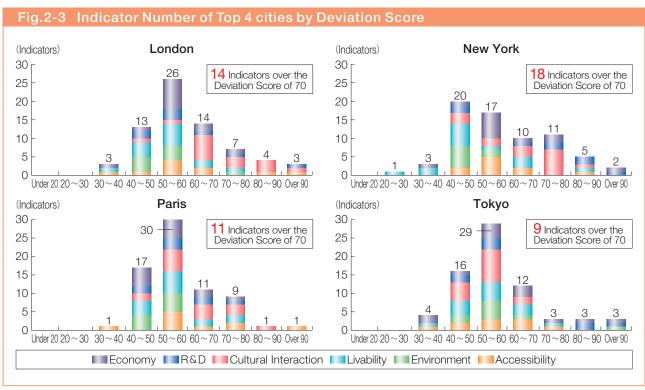
2-3 Actor-Specific Ranking

Manager	London 56.1	Singapore 52.7	1.64	48.4	Hong Kong 47.9	46.8	Seoul 45.5	Paris 45.1	Tokyo 43.7	Zurich 42.3	erdam 41.5	Berlin 41.4 C	Geneva 40.1	Vienna 39.9	Stockholm 39.9	Kuala Lumpur 39.6	39.6	Vancouver 39.3	39.1	Taipei 38.7	Istanbul 38.4	Frankfurt 38.3	Copenhagen 38.0	Barcelona 36.0	Boston 35.4 N	Brussels 35.3	Madrid 34.6	Bangkok 34.3	ton D.C. 33.3	32.9	Chicago 31.5 F	San Francisco 29.9	29.8	Los Angeles 29.4	29.4	Milan 27.8	26.5	aulo 25.3	Cairo 05 3
Researcher	New York	Tokyo	London	Paris	ngeles			Singapore	sco	Sydney	ton D.C.	Chicago		Beijing	Hong Kong			Vienna	Amsterdam	Vancouver	Stockholm	Toronto	Copenhagen		Moscow		Frankfurt	Shanghai	Mexico City	Milan	Fukuoka	Taipei	Madrid	Barcelona			Sao Paulo	ımpur	Mimbai
	63.5 Paris	53.2 New York	50.6 Berlin	46.4 London	38.1 Vienna	36.3 Tokyo	36.2 Barcelona	34.5 Los A	33.7 Amsterdam	30.4 Beijing	30.4 Madrid	29.4 Mexic	28.9 Shanghai	27.7 Chicago	27.5 Milan	27.0 Toronto	26.5 Vancouver	25.9 Brussels	25.6 Frankfurt	24.9 San F	24.8 Stockholm	24.4 Coper	23.4 Washi	22.8 Bangkok	21.7 Istanbul	20.8 Cairo	19.5 Osaka	19.2 Sydney	19.0 Mumbai	18.7 Sao Paulo	18.5 Fukuoka	18.5 Kuala	18.4 Seoul	17.5 Zurich	17.1 Moscow	15.9 Boston	14.9 Taipei		12.2 Singapore
Artist	55						ona	Los Angeles 45				ity								San Francisco 36		Copenhagen 36	Washington D.C. 36									Kuala Lumpur 31							
	55.2 L	52.3 N	50.2 P	49.6 S	47.7 Is	45.9 B	45.7 B	45.0 B	44.7 Te	44.1 S	42.7 V	40.3 B	39.0 A	38.8 N	38.1 H	38.0 S	37.3 Te	36.9 B	36.9 F	36.8 N	36.8 S	36.3 C	36.0 V	35.5 N	34.9 C	34.4 Z	34.3 S	33.5 0	33.4 B	33.0 M	32.4 S	31.7 C	30.8 L	30.5 Ta	30.4 K	28.7 N			22.4 G
Visitor	London	New York	Paris	Shanghai	Istanbul	Barcelona	Beijing	Berlin	Tokyo	Singapore	Vienna	Bangkok	Amsterdam	Madrid	Hong Kong	Seoul	Toronto	Brussels	Frankfurt	Milan	Sydney	Chicago	Vancouver	Mexico City	Cairo	Zurich	San Francisco	Osaka	Boston	Washington D.C.	Stockholm	Copenhagen	Los Angeles	Taipei	Kuala Lumpur	Moscow	Mumbai	Fukuoka	Geneva
	58.4	54.4	51.3	44.0	42.9	42.2	41.5	41.1	40.4	40.0	38.5	38.3	38.2	37.9	37.5	37.0	34.4	34.0	33.1	32.3	32.2	31.3	31.1	31.0	30.2	30.1	29.8	29.8	29.7	29.5	29.0	28.9	28.8	27.5	27.3	25.0	23.8	23.0	22.7
Resident	Paris	London	New York	Tokyo	Zurich	Vienna	Berlin	Frankfurt	Stockholm	Amsterdam	Milan	Copenhagen	Geneva	Washington D.C.	Madrid	Vancouver	Barcelona	Osaka	San Francisco	Boston	Brussels	Toronto	Hong Kong	Seoul	Sydney	Shanghai	Beijing	Singapore	Fukuoka	Taipei	Los Angeles	Chicago	Mexico City	Moscow	Sao Paulo	Bangkok	Istanbul	Kuala Lumpur	Mumbai
	62.6	54.3	53.0	52.1	51.5	51.0	50.5	49.5	48.9	48.7	47.2	46.9	46.7	46.2	45.7	45.4	45.0	44.8	44.7	44.6	44.5	44.4	44.2	44.1	44.0	42.1	42.1	41.1	41.0	40.2	38.9	38.3	34.5	34.5	31.6	31.1	30.5	28.9	27.4

2-4 Analysis of Tokyo's Strengths and Weaknesses

As in the past, Tokyo's strengths lie in "Market Size," "Economic Vitality" and "Human Capital" under **Economy**, as well as in all the indicator groups of the "Research and Development" function. Tokyo also displays strength with "Living Facilities" under **Livability**, "Ecology" under **Environment**, and "Transportation Service of Inner-city" under **Accessibility**. Conversely, as with last year, Tokyo's weaknesses lie in "Market Attractiveness" and "Regulations and Risks," under **Economy**, "Cultural Resources" under **Cultural Interaction**, "Cost of Living" under **Livability**, and "International Transportation Network" and "Traffic Convenience" under **Accessibility**. Looking at the number of indicators by deviation score for Tokyo and the top four cities, Tokyo, with nine, has the fewest number of indicators in which it holds an advantage with a deviation score of 70 or higher, which is one reason why Tokyo is still ranked 4th.

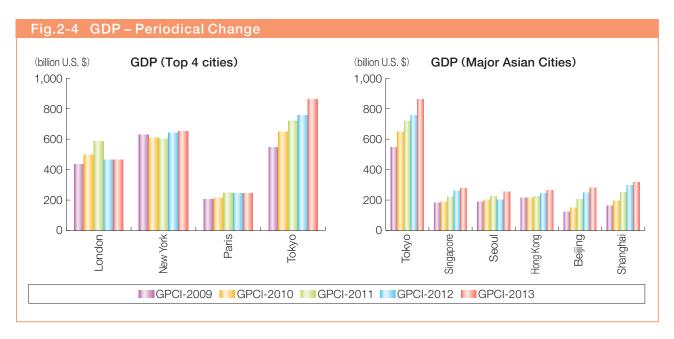




2-5 Over Year Trends

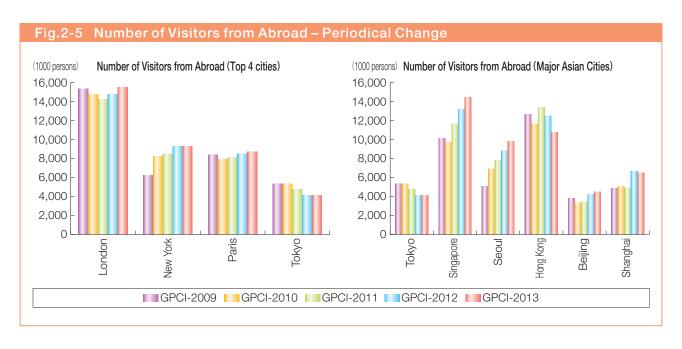
1)GDP

Compared with the top four cities and leading cities of Asia, Tokyo remains dominant. However, it should be noted that nominal GDP was affected by the use of an exchange rate during the yen's appreciation against the dollar. In addition, even though the GDP growth rate for both Beijing and Shanghai is remarkable, when compared with previous year-on-year growth rates, the period between GPCI-2012 and GPCI-2013 indicates sluggish nominal GDP.



2) Number of Visitors from Abroad

Tokyo ranks the lowest among the top four cities and the major Asian cities in this indicator. Of the top four cities, London, fresh from hosting the Olympic Games, is recovering, while among the leading cities of Asia, figures are steadily increasing for Singapore and Seoul.



3.Intangible Urban Value

In order to assess the comprehensive power of cities, the GPCI employs 70 indicators from both quantitative and qualitative perspectives. Using these indicators, but excluding the qualitative indicators based on surveys, the so-called physical appeal of cities is evaluated.

At the same time, from the perspective of actors that play active roles in cities, urban attractiveness is not necessarily limited to just physical elements. It is thought that being able to evoke feelings of comfort, excitement or pride in a city's residents is due to the fact that all cities have the 'power to appeal to human sensitivity.' This power has been defined as **Intangible Urban Value** and is an attempt to evaluate and portray from a fresh viewpoint the future urban power of 10 cities in the GPCI, namely, Barcelona, London, Paris, Vienna, Istanbul, Singapore, Beijing, Seoul, Tokyo and New York.

As part of the framework for conducting new evaluations from the perspective of **Intangible Urban Value**, **Quantitative and Qualitative Characteristics** and **Sense of Values** have been established.

Quantitative and Qualitative Characteristics: Characteristics of a city are evaluated from the viewpoints of **Spatial Setting**, **Activities** and **Spatial Management**.

▶ Spatial Setting:

Layout and geographical features of various elements that constitute urban space, such as social infrastructure, housing, commercial facilities, natural environment and risk of disaster.

Activities:

Value generated by human activity and consumption, such as daily life, business, movement, entertainment and transmission of information in urban spaces.

Spatial Management:

Management and operational ability for realizing the facilitation and promotion of the activities carried out in a city with a certain spatial setting.

Sense of Values: How actors perceive city characteristics is evaluated from the viewpoints of Universal Value, Regional and Cultural Value and Individual Value.

Universal Value :

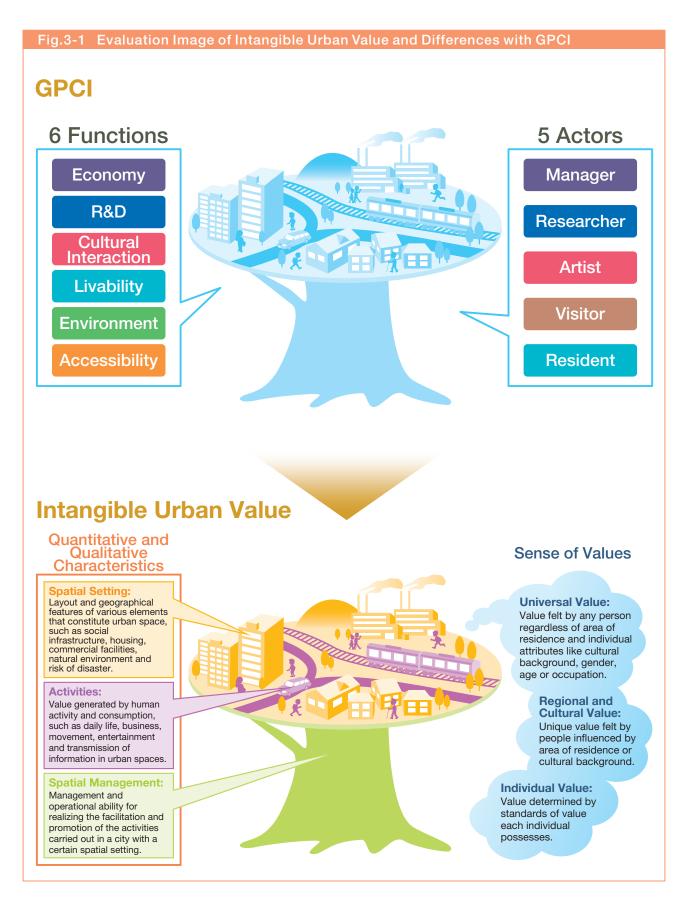
Value felt by any person regardless of area of residence and individual attributes like cultural background, gender, age or occupation.

Regional and Cultural Value :

Unique value felt by people influenced by area of residence or cultural background.

Individual Value:

Value determined by standards of value each individual possesses.



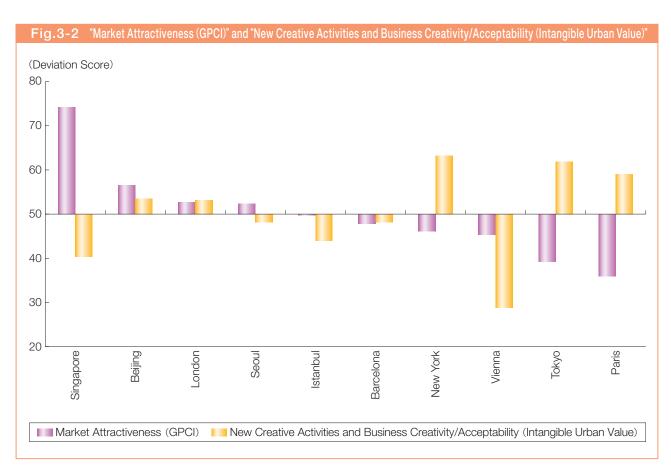
As shown below, analyses are applied to some of the indicator groups in the GPCI by contrasting the GPCI evaluation axis with the **Intangible Urban Value** evaluation axis.

1) Evaluation of "Market Attractiveness" from the viewpoint of Activities

The GPCI uses *GDP Growth Rate* and *Level of Economic Freedom* to assess the "Market Attractiveness" of cities from the perspective of economic growth potential and market environment, but in terms of **Intangible Urban Value**, "New Creative Activities and Business Creativity/Acceptability"* is utilized to evaluate whether or not a new value has emerged with respect to urban activities.

Singapore stands out with a high "Market Attractiveness (GPCI)" rating, but its rating for "New Creative Activities and Business Creativity/Acceptability (Intangible Urban Value)" is low. This suggests that even though Singapore's strengths lie with its high economic growth and robust market environment, the city still has certain issues it must address from the aspect of new business creation activity and acceptability.

In contrast, New York, Tokyo and Paris have low scores for "Market Attractiveness (GPCI)," but their ratings for "New Creative Activities and Business Creativity/Acceptability (Intangible Urban Value)" are high. Owing to the fact that these cities are mature, they trail other cities particularly in terms of economic growth potential with low *GDP Growth Rate*, but they continue to maintain a strong resilience due to a high level of attractiveness from the standpoint of new business activity and creation.



*Note: Cities are listed in order of deviation score for "Market Attractiveness (GPCI)."

The deviation score for "Market Attractiveness (GPCI)" represents the relevant indicator group deviation score (of 10 cities) in the GPCI-2013.

The deviation score for "New Creative Activities and Business Creativity/Acceptability (Intangible Urban Value)" represents the deviation score (of 10 cities) calculated with data related to Creation of New Culture, Art, Entertainment and Business and Acceptability of New Culture, Art, Entertainment and Business collected from The Mori Memorial Foundation's 'Survey on Urban Attractiveness' conducted on the residents of each city.

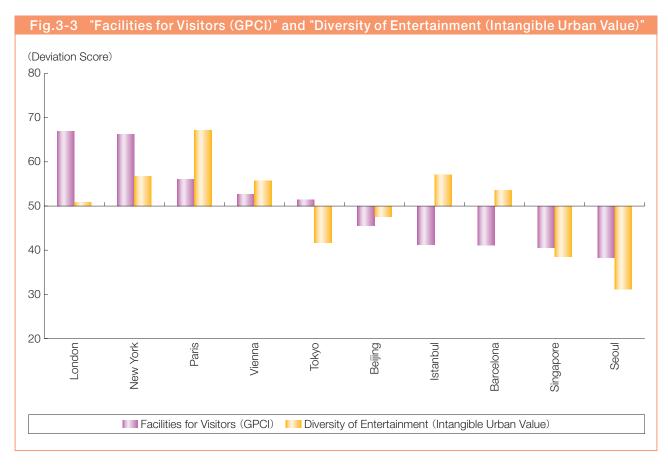
2) Evaluation of "Facilities for Visitors" from the viewpoint of Spatial Management

The GPCI uses the three indicators of *Number of Theaters and Concert Halls*, *Number of Museums* and *Number of Stadiums* to assess whether or not there are enough "Facilities for Visitors," but in terms of **Intangible Urban Value**, the indicator of "Diversity of Entertainment"* is utilized to evaluate the variety of entertainment, recreation and streetscape from the perspective of spatial management.

In terms of "Facilities for Visitors (GPCI)" London and New York are separated by the slimmest of margins and there follows a slight gap between those two cities and Paris, but looking at "Diversity of Entertainment (Intangible Urban Value)," Paris greatly exceeds both London and New York. In addition to having an abundance of facilities for visitors, this result shows that Paris is an extremely diverse city from a spatial management viewpoint.

Of the 10 cities evaluated, Istanbul and Barcelona have low scores for "Facilities for Visitors (GPCI)" but are ranked strongly for "Diversity of Entertainment (Intangible Urban Value)" after Paris and New York.

At the same time, the Asian cities of Tokyo, Beijing, Singapore and Seoul tend to have low scores for "Diversity of Entertainment (Intangible Urban Value)." Tokyo has received a reasonable score for its number of facilities for visitors, but a lack of diversity is one of the city's weaknesses.



^{*}Note: Cities are listed in order of deviation score for "Facilities for Visitors (GPCI)."

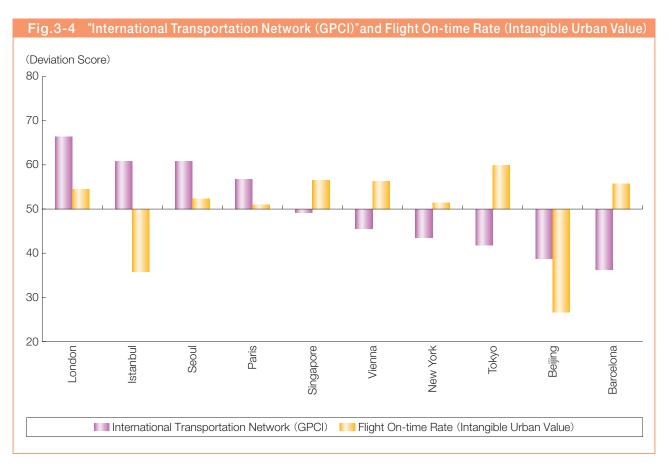
The deviation score for "Facilities for Visitors (GPCI)" represents the relevant indicator group deviation score (of 10 cities) in the GPCI-2013. The deviation score for Diversity of Entertainment (Intangible Urban Value) represents the deviation score (of 10 cities) calculated with data related to Diversity of Entertainment and Recreation, Diversity of Seasonal Entertainment and Recreation and Diversity of Streetscape collected from The Mori Memorial Foundation's 'Survey on Urban Attractiveness' conducted on the residents of each city.

3) Evaluation of "International Transportation Network" from the viewpoint of Spatial Management

The GPCI uses Number of Cities with Direct International Flights and Number of Cities with Direct International Freighter Flights to assess the "International Transportation Network" of cities from the perspective of how well developed the networks are between cities. However, in terms of Intangible Urban Value, Flight On-time Rate* is utilized to evaluate the strength of network administration and management capabilities from the perspective of spatial management.

London, Istanbul, Seoul and Paris all score highly for "International Transportation Network (GPCI)," but not so for Flight On-time Rate (Intangible Urban Value). Despite well-developed international flight networks for these cities, poor flight punctuality is their weakness.

Conversely, Singapore, Vienna, Tokyo and Barcelona all score poorly for "International Transportation Network (GPCI)" compared with other cities such as London, but are rated highly for Flight On-time Rate (Intangible Urban Value). Tokyo, in particular, does not have such a well developed international flight network among the 10 cities evaluated, but it has the highest score for Flight On-time Rate (Intangible Urban Value) and ensures a certain level of punctuality by demonstrating its superior management capabilities.



^{*}Note: Cities listed in order of deviation score for "International Transportation Network (GPCI)."
The deviation score for "International Transportation Network (GPCI)" represents the relevant indicator group deviation score (of 10 cities) in the

The deviation score for Flight On-time Rate (Intangible Urban Value) represents the deviation score (of 10 cities) calculated with data from 'Flight Stats On-time Report, May 2013'.



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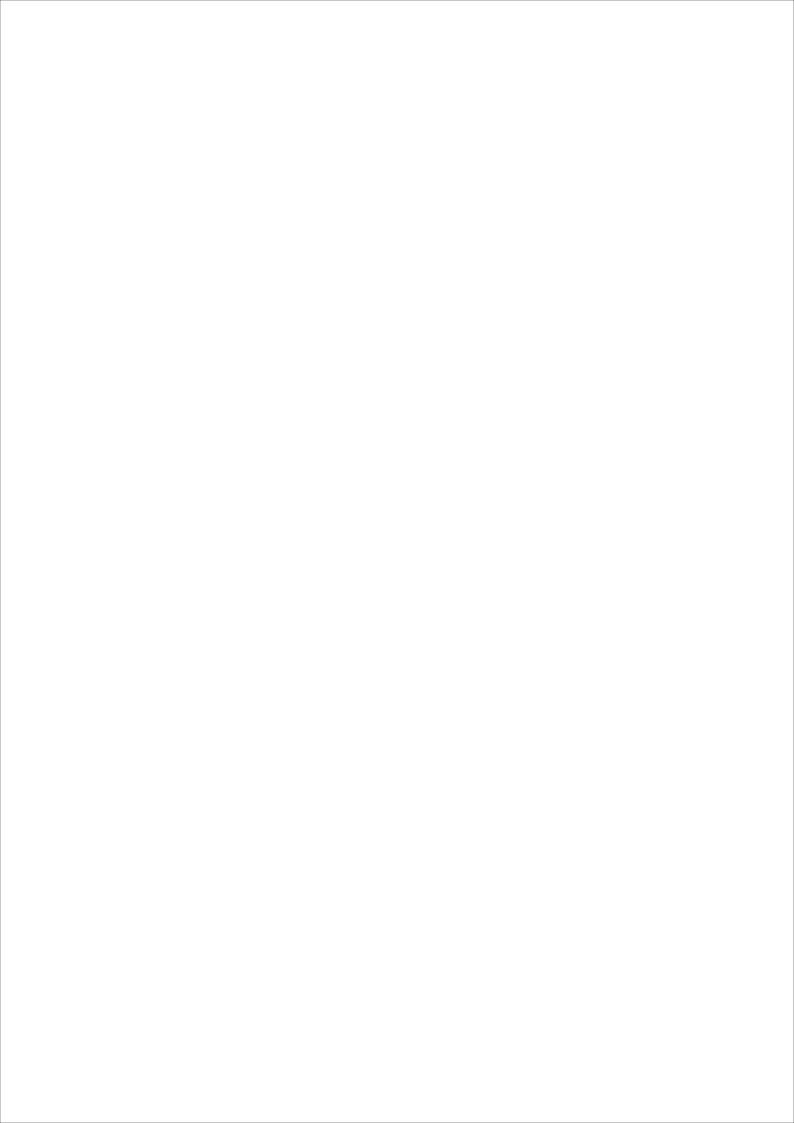
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