



**MARCH 2013** 







The Qatar Financial Centre Authority sponsors Long Finance's 'Financial Centre Futures' programme.

Qatar Financial Centre (QFC) is a financial and business centre established by the government of Qatar in 2005 to attract international financial services and multinational corporations to grow and develop the market for financial services in the region.

QFC consists of a commercial arm, the QFC Authority; and an independent financial regulator, the QFC Regulatory Authority. It also has an independent judiciary which comprises a civil and commercial court and a regulatory tribunal.

QFC aims to help all QFC licensed firms generate new and sustainable revenue streams. It provides access to local and regional investment opportunities. Business can be transacted inside or outside Qatar, in local or foreign currency. Uniquely, this allows businesses to operate both locally and internationally. Furthermore, QFC allows 100% ownership by foreign companies, and all profits can be remitted outside of Qatar.

The QFC Authority is responsible for the organisation's commercial strategy and for developing relationships with the global financial community and other key institutions both within and outside Qatar. One of the most important roles of QFCA is to approve and issue licences to individuals, businesses and other entities that wish to incorporate or establish themselves in Qatar with the Centre.

The QFC Regulatory Authority is an independent statutory body and authorises and supervises businesses that conduct financial services activities in, or from, the QFC. It has powers to authorise, supervise and, where necessary, discipline regulated firms and individuals.

Z/Yen Group thanks the City of London Corporation for its cooperation in the development of the GFCI and for the use of the related data still used in the GFCI. The authors of this report, Mark Yeandle and Chiara von Gunten would like to thank Nick Danev and Michael Mainelli for their contributions with research, modelling and ideas, along with other members of the GFCI team.

#### Foreword

The Global Financial Centres Index (GFCI) is a recognised instrument for gauging the attractiveness – both in absolute and in dynamic terms – of financial centres.

The numerous indicators and assessments used by the Z/Yen Group to derive its bi-annual GFCI ranking have regularly placed Geneva among the Top 15 centres.

This may come as a surprise to those who think of Geneva only as a city of peace (where the Red Cross movement was launched), a meeting point for scientists (who started the world-wideweb at CERN), the most active diplomatic centre (hosting 25 intergovernmental organisations, such as WTO, WHO, ITU, ISO, and hundreds of international NGOs), or as the capital of highquality watch making.

But Geneva is also a global financial centre, servicing all kinds of customers since the Middle Ages: republics, kingdoms, business persons, individuals, families, multilateral organisations, cities and nations, and whose talents often served foreign leaders.

In periods of strong volatility and uncertainty, Geneva, together with Zurich and other regional centres in Switzerland, has demonstrated a sustained commitment in providing tailor-made services to a worldwide clientele.

The Swiss financial industry manages 27 % of transnational private savings, demonstrating an envied leadership in asset management, especially in private banking, where Geneva is the recognised benchmark. The Geneva banking community is also the leader in the highly-complex activity of commodities trade finance.

I do not know if small is beautiful, but certainly smaller players like Switzerland compensate for what they lack in size with skills and training, customer service, attention to detail, respect for tradition and openness to innovation. Its standing as a proven global player – as attested by regular top positions in various measures of competitiveness, R&D, liberties and quality of life – is testimony to the quality of Swiss banking services.

The 35 thousand people who work for the 130 banks and thousands of companies active in Geneva can be proud of making this city a global and experienced financial centre.

**Bernard DROUX** 

Chairman Geneva Financial Centre www.geneva-finance.ch

### GFCI 13 – Summary and Headlines

The GFCI provides profiles, ratings and rankings for 79 financial centres, drawing on two separate sources of data – instrumental factors (external indices) and responses to an online survey. The GFCI was first published by Z/Yen Group in March 2007 and has subsequently been updated every six months. Successive growth in the number of respondents and data has enabled us to highlight the changing priorities and concerns of financial professionals over this time, particularly since financial crises began to unfold in 2007 and 2008. This is the thirteenth edition of GFCI (GFCI 13).

Instrumental factors: previous research indicates that many factors combine to make a financial centre competitive. These factors can be grouped into five over-arching 'areas of competitiveness': People, Business Environment, Infrastructure, Market Access and General Competitiveness. Evidence of a centre's performance in these areas is drawn from a range of external measures. For example, evidence about a fair and just business environment is drawn from a corruption perception index (supplied by Transparency International), an ease of doing business index (from the World Bank) and an operational risk rating (from the EIU). 96 factors have been used in GFCI 13, of which 40 have been updated since GFCI 12. There are 13 new factors in the GFCI (see page 44 for details on all external factors used in the GFCI model).

Financial centre assessments: GFCI uses responses to an ongoing online questionnaire completed by international financial services professionals. Respondents are asked to rate those centres with which they are familiar and to answer a number of questions relating to their perceptions of competitiveness. Responses from 2,379 financial services professionals were collected in the 24 months to December 2012. These responses provided 23,043 financial

centre assessments which were used to compute GFCI 13, with older assessments discounted according to age.

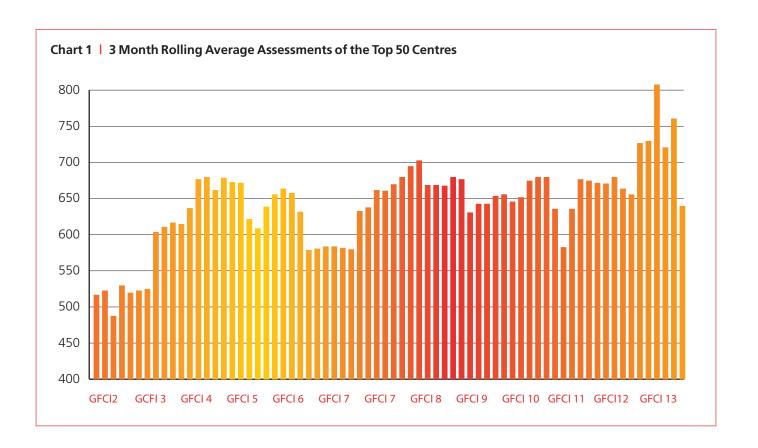
Full details of the methodology behind GFCI 13 can be found on page 39. The ratings and rankings are calculated using a 'factor assessment model', which combines the instrumental factors and questionnaire assessments.

The main headlines of GFCI 13 are:

- London, New York, Hong Kong and Singapore remain the top four centres. London's ratings seem to have been unaffected by the LIBOR scandal. Hong Kong and Singapore are now only two points apart. There is a 48 point spread between London in first place and Singapore in fourth. There is then a gap of 36 points to Zurich in fifth place.
- The financial centres in Europe are still in turmoil as the Eurozone crisis continues. Zurich and Geneva confirm their position in the GFCI top ten. Frankfurt and Paris rise significantly and have closed the gap on London a little. Luxembourg, Vienna, Milan and Rome also show improvements and also move slightly closer to London. Lisbon, Reykjavik, Budapest and Athens however decline, and remain at the bottom of the GFCI rankings. Athens in 79th place is now 68 points adrift of the 78th centre Budapest.
- All Asia/Pacific financial centres except Beijing see their ratings improve in GFCI 13. This confirms our thinking that the decline in ratings in GFCI 12 was a temporary pause rather than the end of their long term improvements. Kuala Lumpur, Singapore and Tokyo experience the strongest rises in the region. Beijing however is the largest faller in GFCI 13, down by 15 places.

- All centres in the Americas see their ratings improve although Chicago, Toronto and San Francisco fall slightly in the ranks. Boston enters the GFCI top ten, climbing to 8th place. Boston was previously in 11th place and has now moved just above Seoul, Chicago and Toronto. All Latin American centres make significant progress in terms of both rankings and ratings. Sao Paulo and Rio de Janeiro are now in the GFCI top 50 both having climbed four places. Buenos Aires makes a significant gain of 55 points and is now in 53rd place.
- Offshore centres continue to gain ground in GFCI 13 with good improvements in their ratings. Jersey and Guernsey remain the leading centres. These two are followed by Monaco (which we classify as 'offshore') which ranks 35th in GFCI 13, up by 25 ranks and 57 points since GFCI 12.

Confidence amongst financial services professionals, indicated by average assessments given to the top 50 centres, was relatively stable during 2011 and the first half of 2012. The second half of 2012 saw higher but more volatile assessments. Chart 1 below shows the stability of overall ratings since 2007.



In GFCI 13, 26 financial centres made improvements in their rankings from GFCI 12, 44 centres declined in the rankings, seven centres experienced no change, and two new centres (Panama and Cyprus) entered the GFCI for the first time. All but six centres in the GFCI experienced a rise in the ratings. The full set of GFCI 13 ranks and ratings are shown in Table 1 below:

Table 1 | GFCI 13 ranks and ratings

	GF	GFCI 13		CI 12	CHANGES	
Centre	Rank	Rating	Rank	Rating	Rank	Rating
London	1	807	1	785	-	▲ 22
New York	2	787	2	765	-	<b>▲</b> 22
Hong Kong	3	761	3	733	-	<b>▲</b> 28
Singapore	4	759	4	725	-	<b>A</b> 34
Zurich	5	723	5	691	-	▲ 32
Tokyo	6	718	7	684	<b>▲</b> 1	<b>A</b> 34
Geneva	7	712	9	682	<b>▲</b> 2	<b>A</b> 30
Boston	8	711	11	680	<b>A</b> 3	<b>▲</b> 31
Seoul	9	710	6	685	? -3	<b>▲</b> 25
Frankfurt	10	703	13	677	<b>A</b> 3	<b>▲</b> 26
Chicago	11	698	8	683	? -3	<b>1</b> 5
Toronto	12	696	10	681	? -2	<b>1</b> 5
San Francisco	13	695	12	678	? -1	<b>1</b> 7
Washington D.C.	14	692	14	672	-	<b>2</b> 0
Vancouver	15	690	16	668	<b>A</b> 1	<b>▲</b> 22
Montreal	16	689	17	667	<b>▲</b> 1	<b>▲</b> 22
Calgary	17	688	23	647	<b>A</b> 6	<b>4</b> 1
Luxembourg	18	687	24	646	<b>A</b> 6	<b>4</b> 1
Sydney	19	686	15	670	? -4	<b>1</b> 6
Vienna	20	685	36	633	<b>▲</b> 16	<b>▲</b> 52
Kuala Lumpur	21	681	26	644	<b>4</b> 5	▲ 37
Osaka	22	676	21	650	? -1	<b>▲</b> 26
Dubai	23	675	22	648	? -1	<b>▲</b> 27
Shanghai	24	674	19	656	? -5	<b>1</b> 8
Melbourne	25	672	18	657	? -7	<b>1</b> 5
Paris	26	670	29	640	<b>A</b> 3	▲ 30
Munich	27	669	25	645	? -2	<b>A</b> 24
Jersey	28	668	20	654	? -8	<b>1</b> 4
Oslo	29	667	33	636	<b>4</b>	▲ 31
Qatar	30	661	35	634	<b>A</b> 5	<b>▲</b> 27
Guernsey	31	660	28	641	? -3	<b>1</b> 9
Stockholm	32	657	27	642	? -5	<b>▲</b> 15
Riyadh	33	656	65	584	▲ 32	<b>▲</b> 72
Amsterdam	34	655	31	638	? -3	<b>1</b> 7
Monaco	35	654	60	597	<b>▲</b> 25	▲ 57
Taipei	36	653	41	628	<b>A</b> 5	<b>▲</b> 25

	GFCI 13		GFCI 12		CHANGES	
Centre	Rank	Rating	Rank	Rating	Rank	Rating
Milan	37	652	51	612	<b>1</b> 4	<b>4</b> 0
Shenzhen	38	650	32	637	? -6	<b>▲</b> 13
Abu Dhabi	39	649	38	631	? -1	<b>▲</b> 18
Rome	40	648	62	590	<b>▲</b> 22	<b>▲</b> 58
Cayman Islands	41	647	44	625	<b>A</b> 3	<b>▲</b> 22
Wellington	42	646	30	639	? -12	<u> 7</u>
Isle of Man	43	645	40	629	? -3	<b>▲</b> 16
Sao Paulo	44	644	48	619	<b>4</b>	<b>▲</b> 25
Copenhagen	45	643	34	635	? -11	<b>A</b> 8
Brussels	46	641	47	620	<b>▲</b> 1	<b>▲</b> 21
British Virgin Islands	47	640	45	624	? -2	<b>▲</b> 16
Rio de Janeiro	48	639	52	608	<b>4</b>	<b>▲</b> 31
Hamilton	49	638	46	621	? -3	<b>▲</b> 17
Glasgow	50	636	39	630	? -11	<b>A</b> 6
Madrid	51	635	50	614	? -1	<b>▲</b> 21
Helsinki	52	634	42	627	? -10	<b>A</b> 7
Buenos Aires	53	633	68	578	<b>▲</b> 15	<b>▲</b> 55
Edinburgh	54	632	37	632	? -17	0
Mexico City	55	628	55	602	_	<b>▲</b> 26
Dublin	56	627	49	618	? -7	<b>A</b> 9
Istanbul	57	626	56	601	? -1	<b>▲</b> 25
Beijing	58	622	43	626	? -15	? -4
Bangkok	59	619	57	600	? -2	<b>▲</b> 19
Gibraltar	60	615	58	599	? -2	<b>▲</b> 16
Prague	61	611	53	604	? -8	<u>7</u>
Johannesburg	62	610	54	603	? -8	<u> 7</u>
Warsaw	63	608	59	598	? -4	<b>1</b> 0
Bahrain	64	607	61	596	? -3	<u> </u>
Moscow	65	606	64	585	? -1	<b>▲</b> 21
Mumbai	66	605	63	586	? -3	<b>▲</b> 19
Panama	67	597	_	_	New	New
Malta	68	595	69	575	<b>A</b> 1	<b>▲</b> 20
 Jakarta	69	592	71	573	<b>▲</b> 2	<b>▲</b> 19
Mauritius	70	590	67	579	? -3	<b>▲</b> 11
Tallinn	71	589	66	583	? -5	<b>A</b> 6
Manila	72	588	73	570	<b>A</b> 1	<b>▲</b> 18
Bahamas	73	587	72	572	? -1	<b>▲</b> 15
St. Petersburg	74	585	70	574	? -4	<b>▲</b> 11
Cyprus	75	576	-	-	New	New
Lisbon	76	552	74	554	? -2	? -2
Reykjavik	77	546	76	539	? -1	<u> </u>
Budapest	78	541			? -3	? -3
Athens	79	473			? -2	<b>▲</b> 10

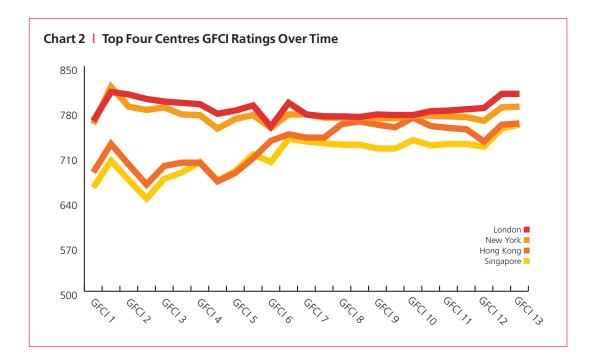
Almaty, Baku, Busan, Guangzhou, Liechtenstein, New Delhi, Riga, Santiago, Tel Aviv and Tianjin have been added to the GFCI questionnaire recently and we track their progress with interest. They have yet to acquire sufficient assessments to be included in the Index.

Other notable features of GFCI 13 include:

- Riyadh is the financial centre showing the strongest progression in GFCI 13, up by 72 points and 32 places;
- Boston and Frankfurt enter the top ten, respectively 8th and 10th, having shown a continuous progression since GFCI 10;
- Chicago and Toronto fall out of the top ten into 11th and 12th places respectively;
- Other centres that have risen by more than 50 points are Buenos Aires, Monaco, Rome and Vienna;

- Beijing is one of the three centres
   experiencing a reduction in both their rating
   and their rank since GFCI 12, down by 4
   points and 15 places. Beijing has been
   declining steadily since GFCI 10;
- Panama and Cyprus enter the GFCI for the first time in 67th and 75th places respectively.

Chart 2 shows a similar progression for the top four centres since GFCI 12. London and New York are both up 22 points since GFCI 12. Singapore is now closer than ever to Hong Kong with only two points (on a scale of 1,000 points) separating them. These top four centres control a large portion of financial transactions and are likely to remain powerful centres for the foreseeable future.



# Areas of Competitiveness

The GFCI questionnaire asks respondents to indicate which factors for competitiveness they consider the most important. The number of times that each area is mentioned is summarised in Table 2:

Table 2 | Main areas of competitiveness

Area of competitiveness	Number of mentions	Main concerns
Business environment	328	The rule of law and low corruption
People	310	Of increasing importance – especially in emerging markets
Taxation	302	Simplicity and stability are required
Reputation	285	Very important, predictability is key
Infrastructure	271	Major focus for emerging centres, being taken for granted in developed centres
Market Access	208	Increasing taken for granted

The GFCI questionnaire asks respondents which centres they consider are likely to become more significant in the next few years. Asia continues to feature strongly and is where respondents expect to observe the most significant improvements in performance:

Table 3 | The ten centres likely to become more significant

Centres likely to become more significant	Number of mentions
Singapore	99
Shanghai	85
Hong Kong	68
Seoul	66
Toronto	45
Sao Paulo	32
Luxembourg	31
Istanbul	30
Beijing	27
Moscow	19
Luxembourg Istanbul Beijing	31 30 27

#### Financial centres, financial services and emerging markets

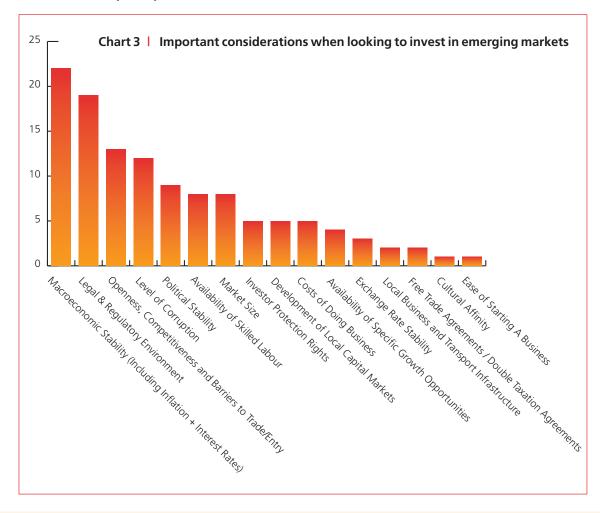
Nearly 40% of the centres included in the GFCI ranking are located in emerging markets. Since these markets gain prominence in the global economy and financial world, we conducted a separate online questionnaire focusing on emerging markets. We asked respondents to indicate which regions they think are most likely to succeed in developing their financial services industry in the next three to five years:

- respondents indicated that China and South Korea would lead the way in Asia/Pacific though they voiced some concerns around currency controls and political stability in China;
- in the Middle East/Africa, Qatar and the UAE would appear to have best prospects, followed by Turkey;

- in Eastern Europe, Poland seems to be the country to watch most closely;
- in Latin America, financial centres in Brazil made good ground in GFCI 13 and are likely to rise further.

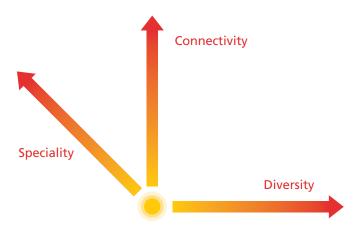
We also asked respondents to name their most important considerations when looking to invest in emerging markets. Chart 3 below shows the most important features:

It is not surprising to see that the most guoted dimensions include regulation, macroeconomic stability, levels of corruption, openness and competitiveness as well as political stability. This suggests that acting on these elements, by favouring transparency and stability, is likely to lead to significant gains in the competitiveness of financial centres in these emerging markets.



#### **Financial Centre Profiles**

Using clustering and correlation analysis we have identified three key measures (axes) that determine a financial centre's profile along different dimensions of competitiveness:



'Connectivity' – the extent to which a centre is well known around the world, and how much non-resident professionals believe it is connected to other financial centres. Respondents are asked to assess only those centres with which they are personally familiar. A centre's connectivity is assessed using a combination of 'inbound' assessment locations (the number of locations from which a particular centre receives assessments) and 'outbound' assessment locations (the number of other centres assessed by respondents from a particular centre). If the weighted assessments for a centre are provided by over 65% of other centres, this centre is deemed to be 'Global'. If the ratings are provided by over 45% of other centres, this centre is deemed to be 'Transnational'.

'Diversity' – the breadth of industry sectors that flourish in a financial centre. We consider this 'richness' of the business environment to be measurable in a similar way to that of the natural environment and therefore,

use a combination of biodiversity indices (calculated on the instrumental factors) to assess a centre's diversity. A high score means that a centre is well diversified; a low diversity score reflects a less rich business environment.

'Speciality' – the depth within a financial centre of the following industry sectors: investment management, banking, insurance, professional services and government and regulatory. A centre's 'speciality' performance is calculated from the difference between the GFCI rating and the industry sector ratings.

In Table 4 overleaf, 'Diversity' (Breadth) and 'Speciality' (Depth) are combined on one axis to create a two dimensional table of financial centre profiles. The 77 centres are assigned a profile on the basis of a set of rules for the three measures: how well connected a centre is, how broad its services are and how specialised it is.



Table 4 | GFCI 13 financial centre profiles

	Broad & deep	Relatively broad	Relatively deep	Emerging
	Global Leaders	Global Diversified	Global Specialists	Global Contenders
	Boston	Amsterdam	Brussels	Beijing
	Frankfurt	Dublin	Geneva	Dubai
	Hong Kong	Seoul	Luxembourg	Moscow
	London			
	New York			
Global	Paris			
	Singapore			
	Sydney			
	Tokyo			
	Toronto			
	Zurich			
	Established	Transnational	Transnational	Transnational
	Transnational	Diversified	Specialists	Contenders
	Chicago	Kuala Lumpur	Athens	British Virgin Islands
	Istanbul	Milan	Bahrain	Buenos Aires
	Madrid	Rome	Copenhagen	Calgary
	Montreal	Shanghai	Helsinki	Cayman Islands
	Munich	Vancouver	Monaco	Edinburgh
Transnational	San Francisco	Vienna	Qatar	Gibraltar
	Washington DC			Guernsey
				Isle of Man
				Jersey
				Malta
				Mumbai
				Rio de Janeiro
				Riyadh
	Established Players	Local Diversified	Local Specialists	Evolving Centres
	Lisbon	Melbourne	Bahamas	Abu Dhabi
	Stockholm	Osaka	Budapest	Bangkok
	Warsaw	Sao Paulo	Cyprus	Glasgow
			Oslo	Hamilton
			Panama	Jakarta
Lead			Prague	Johannesburg
Local			Reykjavik	Manila
			Tallinn	Mauritius
				Mexico City
				Shenzhen
				St Petersburg
				Taipei
				Wellington

The 11 Global Leaders (in the top left of the table) have both broad and deep financial services activities and are connected with many other financial centres. This list includes London, New York, Hong Kong and Singapore, the leading global financial centres. A significant number of centres have moved profile since GFCI 12 including:

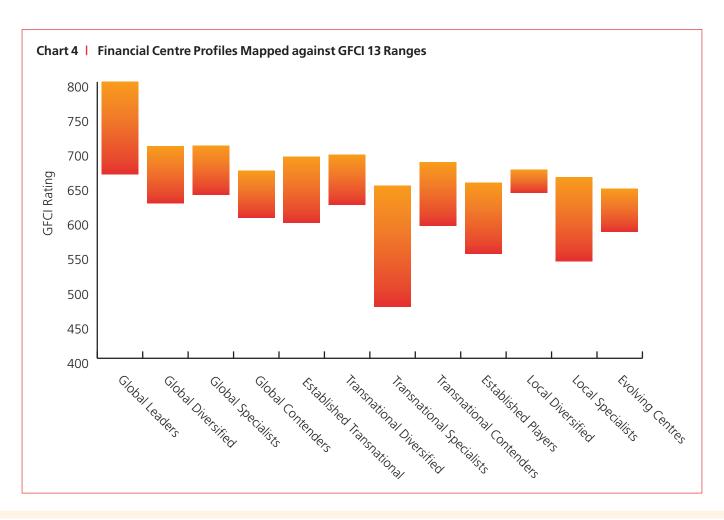
- Boston and Sydney are now Global Leaders, they were previously Transnational centres;
- Brussels is now a Global Specialist, it was previously an Established Transnational Centre;
- Dubai and Beijing are back to being Global Contenders, they were previously Global Specialists;
- Chicago moves from Global Leader to Established Transnational:

- Monaco is now a Transnational Specialist, it was previously a Local Specialist;
- Rio de Janeiro becomes a Transnational Contender, it was previously a Local Specialist;
- Milan, Rome and Vienna are now Transnational Diversified centres, they were previously Established Players.

Chart 4 below shows the profiles mapped against the range of GFCI 13 ratings:

"Zurich is becoming much more important for my business now - it has become a real global player"

Asset Manager based in Paris



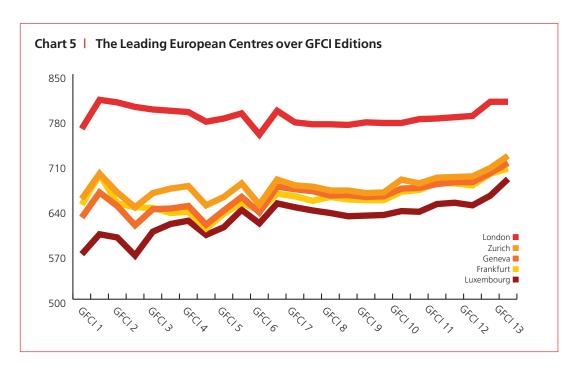
## Europe

Table 5 shows the top 20 European financial centres in the GFCI. As in GFCI 12, the leading centres in Europe are London, Zurich and Geneva and they all see rises in their ratings. Geneva is 7th, up by two places since GFCI 12. Compared to GFCI 12, all European centres (with the exception of Edinburgh) have seen an increase in their ratings in GFCI 13, with particularly strong rises for Vienna and Rome up by respectively 52 and 59 points. Many centres, including Copenhagen, Glasgow, Helsinki, and Edinburgh, experience however relative declines in rankings as their progression in score is outperformed by that of other centres.

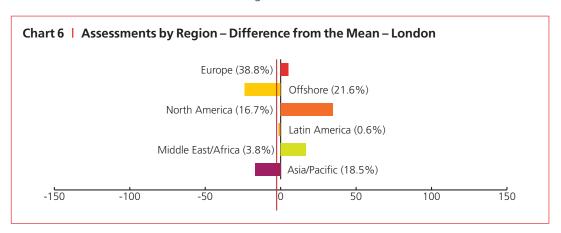
Table 5 | Top 20 European Centres in GFCI 13

	GFCI 12	GFCI 12	GFCI 11	GFCI 11	Change in	Change in
	rank	rating	rank	rating	rank	rating
London	1	807	1	785	-	<b>▲</b> 22
Zurich	5	723	5	691		<b>▲</b> 32
Geneva	7	712	9	682	<b>A</b> 2	<b>A</b> 30
Frankfurt	10	703	13	677	<b>A</b> 3	<b>▲</b> 26
Luxembourg	18	687	24	646	<b>A</b> 6	<b>4</b> 1
Vienna	20	685	36	633	<b>1</b> 6	<b>▲</b> 52
Paris	26	670	29	640	<b>A</b> 3	<b>A</b> 30
Munich	27	669	25	645	▼ -2	<b>▲</b> 24
Oslo	29	667	33	636	<b>4</b>	▲ 31
Stockholm	32	657	27	642	▼ -5	<b>▲</b> 15
Amsterdam	34	655	31	638	▼ -3	<b>▲</b> 17
Milan	37	652	51	612	<b>1</b> 4	<b>4</b> 0
Rome	40	648	62	590	<b>▲</b> 22	▲ 58
Copenhagen	45	643	34	635	▼ -11	▲ 8
Brussels	46	641	47	620	<b>1</b>	▲ 21
Glasgow	50	636	39	630	▼ -11	<b>A</b> 6
Madrid	51	635	50	614	▼ -1	▲ 21
Helsinki	52	634	42	627	▼ -10	<b>A</b> 7
Edinburgh	54	632	37	632	▼ -17	0
Dublin	56	627	49	618	▼ -7	<b>A</b> 9

Chart 5 on page 13 shows that the competitiveness of the five European leads has improved after falling back slightly between GFCI 11 and 12. Interestingly, Luxembourg progresses significantly, up by 41 points and thus gains six places in the GFCI.

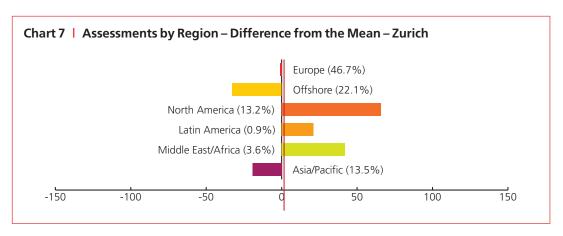


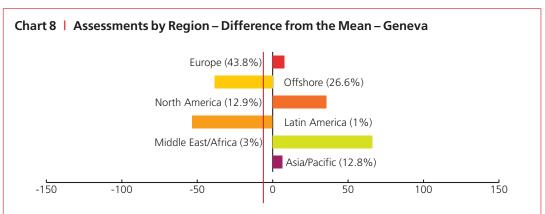
Examining the assessments given to each major centre is a useful means of assessing the relative strength and weakness of their reputations in different regions. It is important to note that assessments given to a centre by people based there are excluded from the GFCI model to eliminate 'home preference'. The charts below show the difference between overall mean assessments by region. The additional vertical line shows the mean if all assessments from the whole of the home region are removed:

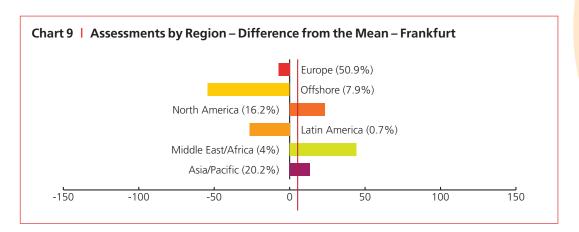


London's overall average assessment is 839, up from 819 in GFCI 12. As in previous editions, London continues to be well regarded in North America (and by the few respondents in Latin America and the Middle East) but less well rated by respondents from offshore centres and Asia & Pacific centres.

Zurich's overall average assessment is 762 up significantly from 721 in GFCI 12. North American assessments of Zurich together with those from the Middle East & Africa are strong. European respondents are much closer to the mean. Compared with GFCI 12, Asia/Pacific respondents have become more favourable to Zurich.

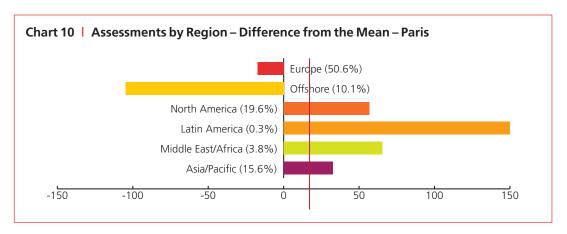


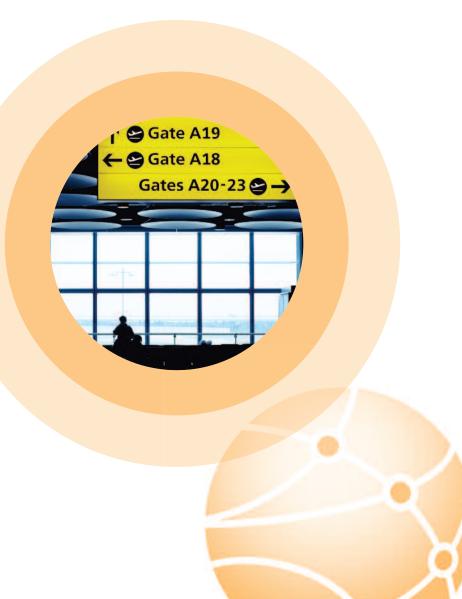




Geneva's overall average assessment is 739 up from 709 in GFCI 12. Geneva is well regarded by respondents based in Middle East/Africa, North America. European and Asia/Pacific respondents are also slightly more positive than in previous editions. Geneva continues however to be given lower assessments by people based in offshore locations.

Frankfurt's overall average assessment is 727, up after a slight downfall in GFCI 12. Frankfurt is given lower assessments by people based in offshore locations and in other European centres.





The overall average assessment for Paris is 674, slightly up from GFCI 11 after a sharp downfall in GFCI 12. Paris shows a similar pattern of average assessments to Frankfurt with lower assessments by offshore and other European respondents. We suspect that this may be influenced by criticisms about the possible implementation of a financial transaction tax in some European countries and the continuous expectations placed on France and Germany in taking the lead in addressing the Eurozone crisis. Luxembourg showed one of the most significant rises in average assessment, up from 688 to 736.

"London continues to receive bad news – LIBOR, capping of bonuses, corruption – when will it end and what does it take for London to lose its top spot?"

Investment Banker based in London

#### Asia/Pacific

After a downward progression in GFCI 11 and GFCI 12 for many centres, all Asian/Pacific centres except Beijing see their ratings improve in GFCI 13:

Table 6 | The Top 15 Asia/Pacific Centres in GFCI 13

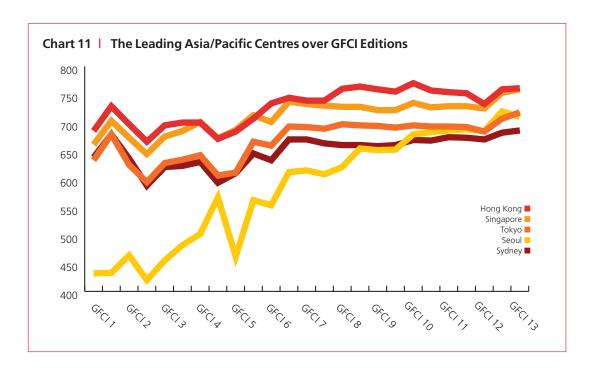
	rank	rating	GFCI 12 rank	GFCI 12 rating	Change in rank	Change in rating
Hong Kong	3	761	3	733	-	▲ 28
Singapore	4	759	4	725	-	<b>▲</b> 34
Tokyo	6	718	7	684	<b>A</b> 1	<b>A</b> 34
Seoul	9	710	6	685	▼ -3	▲ 25
Sydney	19	686	15	670	▼ -4	<b>1</b> 6
Kuala Lumpur	21	681	26	644	<b>A</b> 5	<b>▲</b> 37
Osaka	22	676	21	650	▼ -1	<b>A</b> 26
Shanghai	24	674	19	656	▼ -5	<b>1</b> 8
Melbourne	25	672	18	657	▼ -7	<b>▲</b> 15
Taipei	36	653	41	628	<b>4</b> 5	▲ 25
Shenzhen	38	650	32	637	▼ -6	<b>1</b> 3
Wellington	42	646	30	639	▼ -12	<b>A</b> 7
Beijing	58	622	43	626	▼ -15	▼ -4
Bangkok	59	619	57	600	▼ -2	<b>1</b> 9

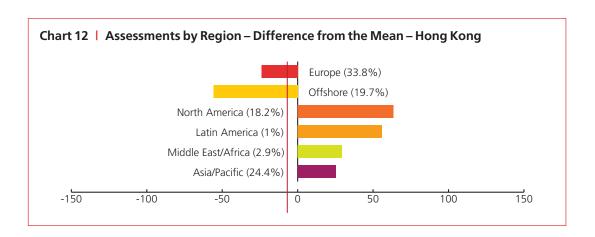
As shown in the table above, Kuala Lumpur experiences the strongest increase in ratings (up by 37 points), followed by Singapore and Tokyo which both gain 34 points. Many centres however have experienced a decline in rank, especially Wellington and Beijing, down by 12 and 15 places respectively.

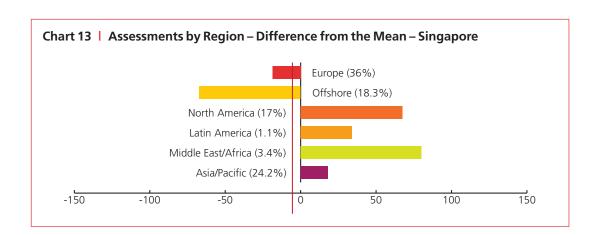
Chart 11 on page 17 shows positive signs of progress in competitiveness for Asia/Pacific centres since GFCI 11-12:

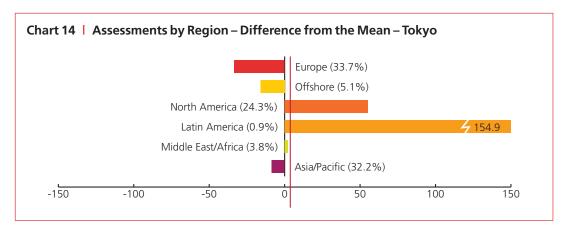
Hong Kong has an average assessment of 811 up from 777 in GFCI 12. It continues to attract higher than average assessments from Asia/Pacific and North America but it is less well perceived by respondents based in offshore and European centres. The pattern for Singapore (average assessment 816) is very similar:



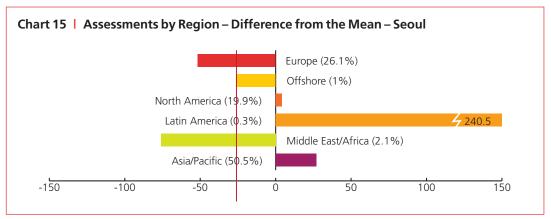




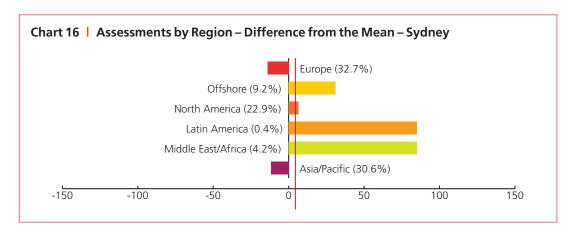




The average assessment for Tokyo is 770, a significant increase from 718 in GFCI 12. Responses from North America are more positive than average. Responses from Europe and the offshore centres are less positive than average about all Asian centres. This pattern of regional variation is broadly similar for Seoul as shown below:



Sydney's average assessment in GFCI 13 is 715. Sydney is particularly highly rated by respondents from Middle East/Africa, Latin America but also North America and Offshore centres. It is however less highly rated by respondents from other Asia/Pacific centres as well as European centres.



"Hong Kong and Singapore are still the clear leaders in Asia – as far as I am concerned they are becoming even stronger."

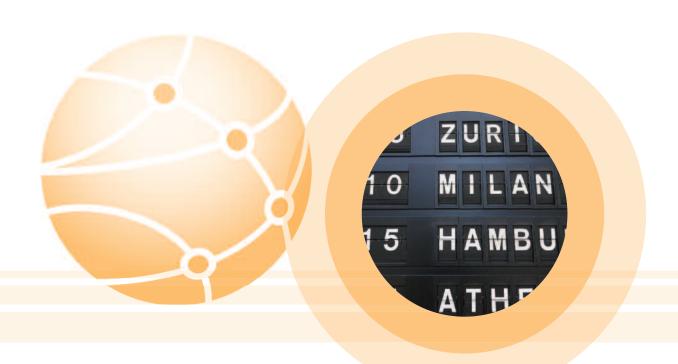
Investment Banker based in Sydney

### The Americas

New York and Boston lead the American centres in GFCI 13. Financial centres in the Americas are nearly all up in terms of both rankings and ratings since GFCI 12 (except for Chicago, Toronto and San Francisco, which despite some progress in points experience relative declines in the ranks). The USA keeps five centres in the top 15, while Canada has all four centres in GFCI 13 top 20. Of all centres in the Americas, Buenos Aires shows the largest rise, up by 15 places and 55 points. Latin American centres are rising up both in terms of ranking and ratings. Panama is a new entrant in GFCI 13.

Table 7 | North American and Latin American Centres in GFCI 13

	GFCI 13 rank	GFCI 13 rating	GFCI 12 rank	GFCI 12 rating	Change in rank	Change in rating
New York	2	787	2	765	-	<b>▲</b> 22
Boston	8	711	11	680	▲ 3	▲ 31
Chicago	11	698	8	683	▼ -3	<b>▲</b> 15
Toronto	12	696	10	681	▼ -2	<b>▲</b> 15
San Francisco	13	695	12	678	▼ -1	<b>▲</b> 17
Washington D.C.	14	692	14	672	_	<b>1</b> 20
Vancouver	15	690	16	668	<b>A</b> 1	<b>▲</b> 22
Montreal	16	689	17	667	<b>A</b> 1	▲ 22
Calgary	17	688	23	647	<b>A</b> 6	<b>4</b> 1
Sao Paulo	44	644	48	619	<b>4</b>	<b>▲</b> 25
Rio de Janeiro	48	639	52	608	<b>4</b>	▲ 31
Buenos Aires	53	633	68	578	<b>1</b> 5	<b>▲</b> 55
Mexico City	55	628	55	602	-	<b>▲</b> 26
Panama	67	597	New	New	New	New



450

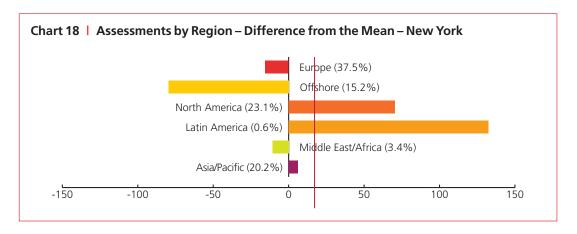
400

Chart 17 | Selected North American and Latin American Centres over GFCI Editions 800 750 700 650 600 550 Boston = Toronto 500 Montreal -

Sao Paulo ■ Buenos Aires ■

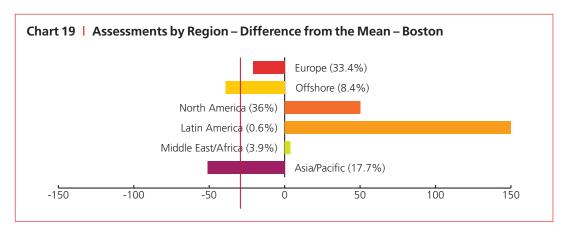
Chart 17 below shows leading American centres all progressing since GFCI 12 with New York maintaining its leadership in North America:

The difference between regional assessments for some of the major North American centres is shown below.

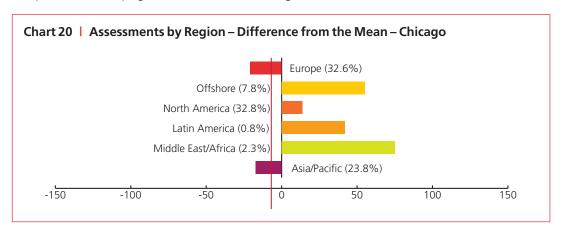


New York's overall average assessment is 834, up from 809 in GFCI 12. New York continues to benefit from strong North American support. Offshore centres assess New York less positively, possibly due to USA clampdowns on fiscal evasion and offshore activities. Assessments from Europe are also less favourable than average.

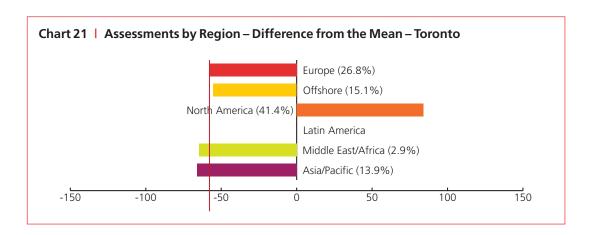
Boston's overall average assessment is 786, up by 77 points in GFCI 12. Like New York, Boston enjoys strong support from respondents in North America and Latin America. It is less well rated by respondents from Asia/Pacific, Offshore and European centres.



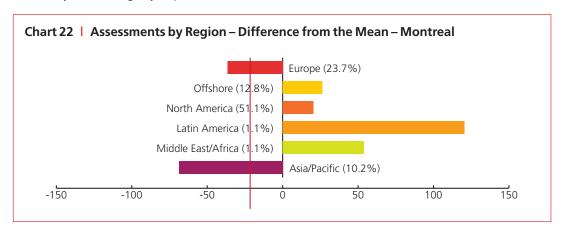
Chicago's overall average assessment is back to 725 after a small decline in GFCI 12. Assessments of Chicago show that respondents from everywhere except Asia and Europe gave the centre above average assessments.



Similarly to GFCI 12, Toronto has favourable ratings from the USA and other Canadian centres but is assessed less favourably everywhere else. Toronto overall average assessment in GFCI 13 is 773 up by 12 from GFCI 12.



Montreal shows a similar pattern to Toronto except that it is viewed more favourably than average by respondents in offshore locations:



"Canada continues to do well – excellent risk averse reputation and a strong regulatory regime. Let's see what Mark Carney can do for London."

Asset Manager based in New York



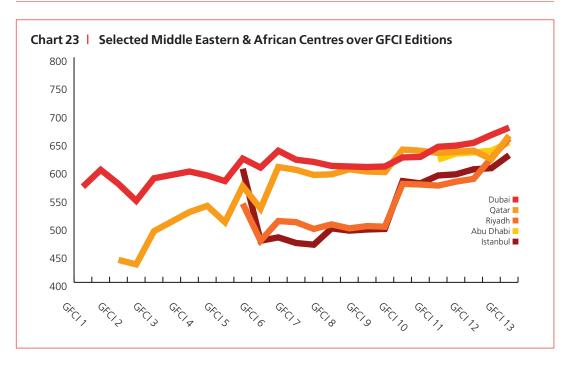
#### The Middle East and Africa

Of the five Middle Eastern centres in the GFCI, Dubai continues as the top Middle Eastern centre in GFCI 13 followed by Qatar, and their progression in ratings seems to follow the same pace. Riyadh is third and shows marked progress in terms of both rankings and ratings, up by 32 places and 72 points respectively.

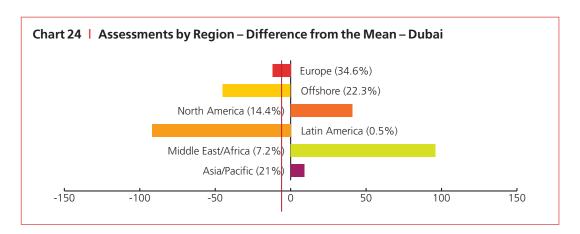
Istanbul continues to progress, up by 25 points but loses one place. Johannesburg makes the least significant progress in ratings, only up by 7 points, resulting in a relative decline in rankings.

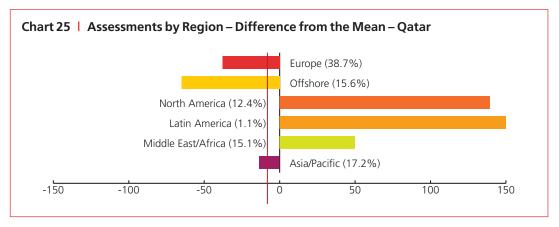
Table 8 | The Middle Eastern and African centres in GFCI 13

	GFCI 13 rank	GFCI 13 rating	GFCI 12 rank	GFCI 12 rating	Change in rank	Change in rating
Dubai	23	675	22	648	▼ -1	▲ 27
Qatar	30	661	35	634	<b>A</b> 5	<b>▲</b> 27
Riyadh	33	656	65	584	▲ 32	<b>▲</b> 72
Abu Dhabi	39	649	38	631	▼ -1	<b>1</b> 8
Istanbul	57	626	56	601	▼ -1	▲ 25
Johannesburg	62	610	54	603	▼ -8	<b>A</b> 7
Bahrain	64	607	61	596	▼ -3	<b>1</b> 1

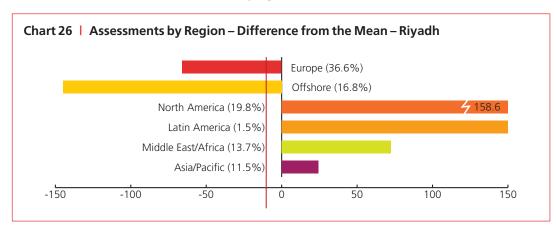


The charts below show Dubai and Qatar get strong support from other Middle East/Africa respondents and from North America and Asia/Pacific. Overall average assessments for Dubai and Qatar are 692 and 682 respectively (a rise of 32 for Dubai and a significant 93 points for Qatar). Their assessments by respondents based in Offshore centres and Europe tend however to be below average.

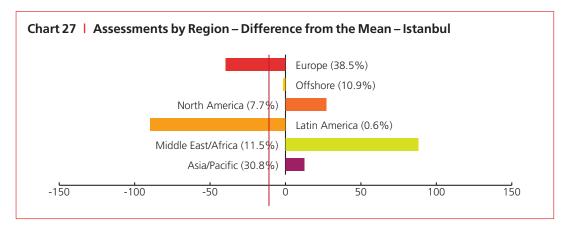




Riyadh average assessments are up by 127 points to 622 since GFCI 12. The centre shows a similar trend in assessments by region as Dubai and Qatar:



Istanbul's overall average assessment is 590. The centre is well supported by respondents based in Middle East/Africa, Asia/Pacific and North America but has a lower reputation amongst European and Latin American respondents:



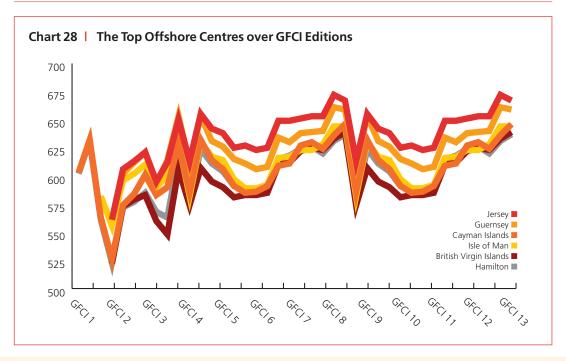
"My colleagues in Istanbul are making lots of positive noises about the city – it finally seems to be on the move after promising so much for so long." Investment Banker based in Dubai

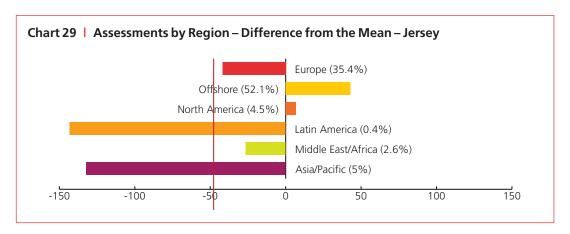
### Offshore Centres

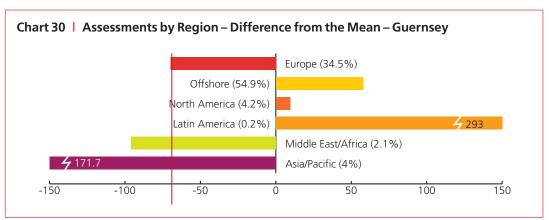
Offshore centres suffered significant reputational damage in 2008 and 2009. They have been recovering since GFCI 10. GFCI 13 shows good progress in ratings for all offshore centres, though most experience relative declines in rankings since other financial centres have progressed. Monaco shows the most marked advance since GFCI 12 with 57 points (moving up by 25 places) in the overall index. Jersey and Guernsey remain the leading offshore centres:

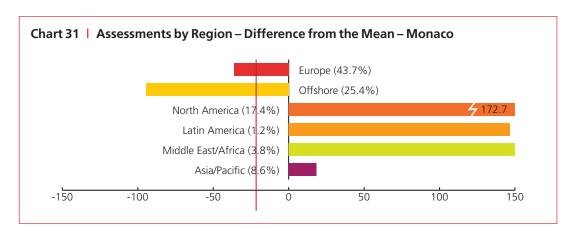
Table 9 | Top offshore centres in GFCI 13

	GFCI 13 rank	GFCI 13 rating	GFCI 12 rank	GFCI 12 rating	Change in rank	Change in rating
Jersey	28	668	20	654	▼ -8	<b>1</b> 4
Guernsey	31	660	28	641	▼ -3	<b>1</b> 9
Monaco	35	654	60	597	▲ 25	<b>▲</b> 57
Cayman Islands	41	647	44	625	▲ 3	▲ 22
Isle of Man	43	645	40	629	▼ -3	<b>1</b> 6
British Virgin Islands	47	640	45	624	▼ -2	<b>1</b> 6
Hamilton	49	638	46	621	▼ -3	<b>▲</b> 17
Gibraltar	60	615	58	599	▼ -2	<b>1</b> 6
Malta	68	595	69	575	<b>A</b> 1	<b>2</b> 0
Mauritius	70	590	67	579	▼ -3	<b>1</b> 1
Bahamas	73	587	72	572	▼ -1	<b>▲</b> 15
Cyprus	75	576	New	New	New	New



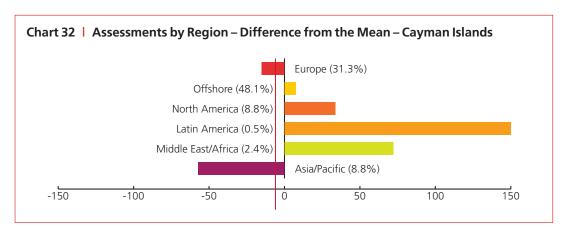






A significant proportion of the assessments of offshore centres are coming from other offshore centres. Average assessments for Jersey are 693, and are 707 for Guernsey. Both centres get good assessments from other offshore centres but below average assessments from all other respondents (except for Guernsey, which gets above average assessments from Latin American respondents):

Assessments by region for Monaco show a slightly different picture than for Guernsey and Jersey. As shown in chart 31 above, Monaco is highly rated by respondents in Latin America, North America and Middle East/Africa but received below average assessments from other offshore centres and Europe. Monaco's average assessment is up by 110 points since GFCI 12.



The Cayman Islands shows a slightly more balanced picture with slightly above average assessments from other offshore centres and slightly below average assessments from Europe and Asia/Pacific.

"Many of the offshore centres have gained excellent staff with solid expertise in their field. The leading centres also seem to be fighting corruption and money-laundering effectively."

Asset Manager based in London



### Industry Sectors

Industry sector sub-indices are created by building the GFCI statistical model using only the questionnaire responses from respondents working in the relevant industry sectors. The GFCI 13 dataset has been used to produce separate sub-indices for the Investment Management, Banking, Government & Regulatory, Insurance and Professional Services sectors.

In this edition, the Investment Management sub-sector regroups Asset Management and Wealth Management & Private Banking. A more elaborate industry split including Trading and Finance will be presented in GFCI 14 once relevant data becomes available.

Table 10 below shows the top ten ranked financial centres in the industry sector sub-indices:

Rank	Investment Management	Banking	Government & regulatory	Insurance	Professional services
1	London (-)	New York (-)	London (-)	New York (+1)	London (-)
2	New York (-)	London (-)	New York (-)	Hong Kong (+2)	New York (-)
3	Singapore (-)	Hong Kong (+1)	Hong Kong (-)	London (-2)	Hong Kong (-)
4	Hong Kong (-)	Singapore (+1)	Singapore (-)	Singapore (-)	Singapore (-)
5	Tokyo (-)	Seoul (-2)	Geneva (+3)	Zurich (-)	Zurich (-)
6	Zurich (+3)	Tokyo (-)	Zurich (+3)	Boston (+5)	Geneva (-)
7	Boston (-1)	Boston (+7)	Tokyo (-)	Geneva (-)	Chicago (-)
8	Geneva (+5)	Zurich (-)	Paris (-3)	Tokyo (-2)	Boston (+3)
9	Chicago (-2)	Frankfurt (-2)	Chicago (+2)	Paris (+12)	Tokyo (+5)

Chicago (-2)

Toronto (-3)

Table 10 | GFCI 13 industry sector sub-indices Top 10

The top four centres in the GFCI 13 overall index are top of the Investment Management, Banking, Government & Regulatory, Insurance and Professional Services sub-indices. London appears at the top of three of the five sub-indices. New York tops the Banking sub-index as in GFCI 12 and in this edition it also tops the Insurance sub-index. Hong Kong progresses 1 place in the Banking sub-index and two places in the Insurance sub-index where it now comes second to New York. Zurich and Tokyo remain well placed across all sub-sectors. Geneva and Boston are in the top 10 across four out of five sector sub-indices. Paris shows marked progress in the Insurance sub-index where it gains 12 ranks.

San Francisco (+3) Frankfurt (-4)

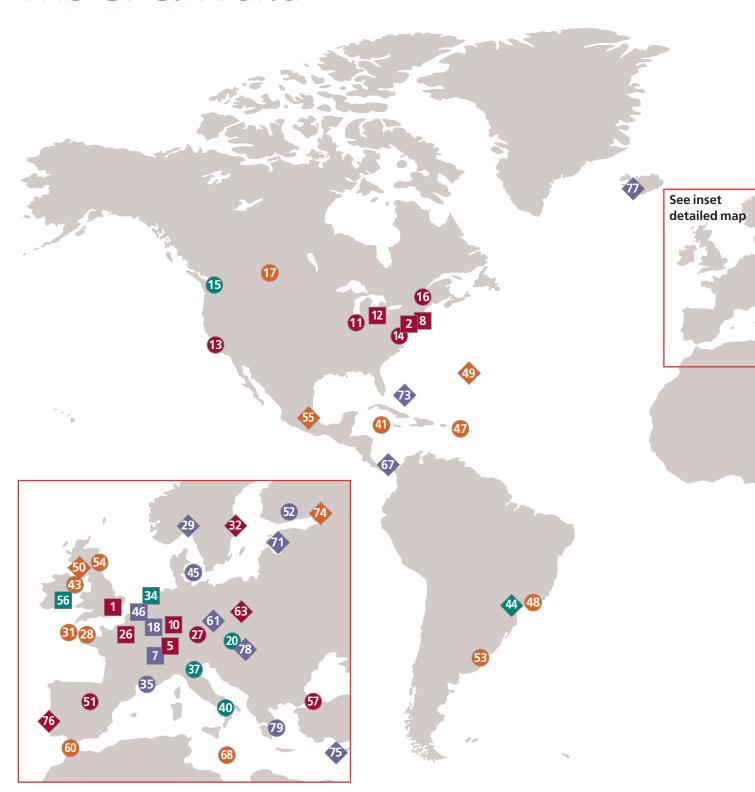
"Good to see Geneva so well rated – they have dealt well with the international pressure for less secrecy."

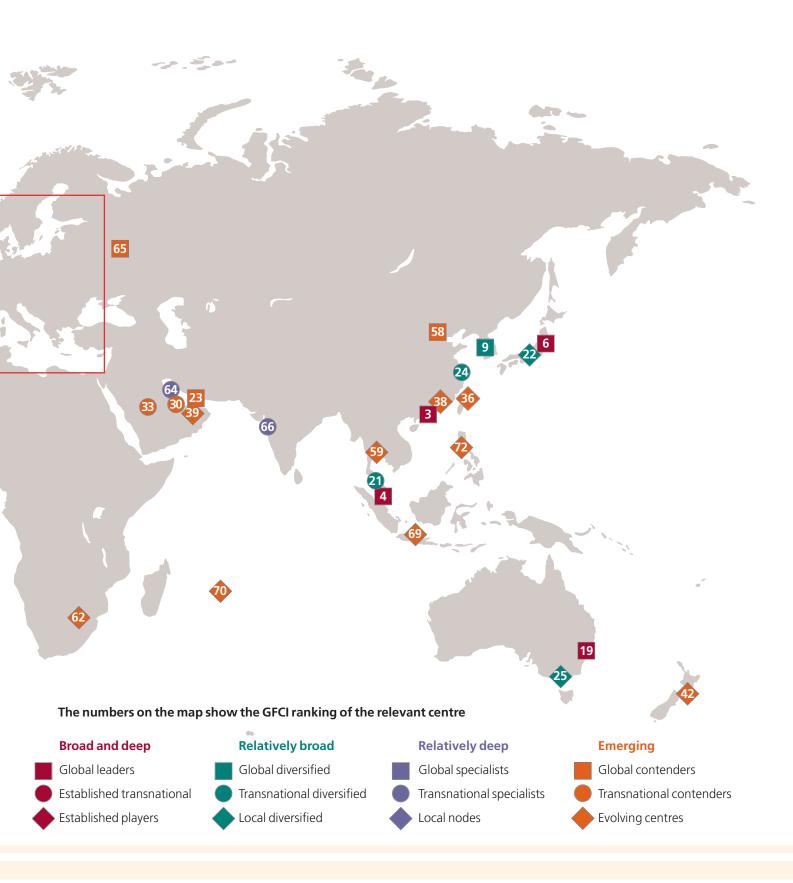
Private Wealth Manager based in Paris

San Francisco (-)



# The GFCI World





### Five Areas of Competitiveness

The instrumental factors used in the GFCI model are grouped into five key areas of competitiveness (People, Business Environment, Market Access, Infrastructure and General Competitiveness). To assess how financial centres rank in each of these areas, the GFCI 13 factor assessment model is run with one of the five groups of instrumental factors at a time. Table 11 shows the top ten ranked centres in each sub-index:

Table 11 | GFCI 13 Area of competitiveness sub-indices – Top 10

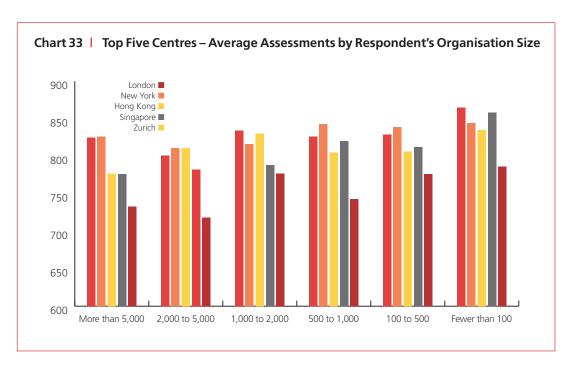
Rank	People	Business environment	Market access	Infrastructure	General competitiveness
1	London (-)	London (-)	London (-)	London (-)	London (-)
2	New York (-)	New York (-)	New York (-)	New York (-)	New York (-)
3	Hong Kong (-)	Hong Kong (-)	Hong Kong (-)	Hong Kong (-)	Hong Kong (-)
4	Singapore (-)	Singapore (-)	Singapore (-)	Singapore (-)	Singapore (-)
5	Zurich (-)	Zurich (-)	Zurich (-)	Zurich (-)	Zurich (-)
6	Tokyo (-)	Geneva (-)	Geneva (-)	Boston (+6)	Boston (+6)
7	Boston (+4)	Boston (+4)	Boston (+2)	Tokyo (+2)	Tokyo (-)
8	Geneva (+2)	Tokyo (-)	Tokyo (-1)	Geneva (-1)	Geneva (-)
9	Frankfurt (+2)	Frankfurt (-)	Frankfurt (+1)	Seoul (-3)	Frankfurt (+1)
10	Toronto (-1)	Chicago (-1)	Chicago (-3)	Frankfurt (-1)	Seoul (-4)

The top four financial centres in GFCI 13 – London, New York, Hong Kong and Singapore –also share the top four places in each of these sub indices (as they have in the past five editions of GFCI). This confirms their strength in all five areas of competitiveness. It also confirms our belief that a genuinely top global centre is competitive in all areas – successful people like to live and work in successful centres. Geneva, Zurich, Tokyo and Frankfurt also confirm their place in the top ten across all sub indices. The greatest progression can be observed for Boston, which not only enters the top ten but does so across all five areas of competitiveness.

"I follow this table with interest – it seems that if a leading centre is strong in one area, it will be strong in all areas – clustering is alive and well."

Consultant based in New York

# Size of Organisation



It is useful to look at how the leading centres are viewed by respondents working for different sizes of organisation.

Chart 33 above shows that London and Singapore are more highly assessed than both New York and Hong Kong by respondents from small organisations (with fewer than 100 employees). At the other end of the scale, respondents from organisations with over 5,000 employees assess more highly New York and London than the other centres.

"London remains the best base for my M&A business."

Director of small M&A law firm based in London

# Reputation

In the GFCI model, one way to look at reputation is to examine the difference between the average assessment given to a centre and its overall rating (the average assessment adjusted to reflect the instrumental factors). If a centre has a higher average assessment than the GFCI 13 rating this indicates that respondents' perceptions of a centre are more favourable than the quantitative measures alone would suggest. This may be due to strong marketing or general awareness. Table 12 below shows the 20 centres with the greatest positive difference between average assessment and the GFCI rating:



Table 12 | GFCI 13 Top 20 centres assessments & ratings – reputational advantage

Centre	Weighted average assessment	GFCI 13 rating	Reputational advantage
Boston	778	711	67
Tokyo	781	718	63
Singapore	820	759	61
Vienna	740	685	55
Hong Kong	812	761	51
Kuala Lumpur	730	681	49
New York	831	787	44
Monaco	695	654	41
Zurich	762	723	39
Toronto	729	696	33
San Francisco	726	695	31
Geneva	741	712	29
Chicago	726	698	28
Qatar	689	661	28
London	834	807	27
Sydney	713	686	27
Seoul	735	710	25
Frankfurt	728	703	25
Vancouver	712	690	22
Oslo	689	667	22

Overall reputational advantage has remained fairly stable since GFCI 12. Worth noting is the entrance of Vienna, Monaco, Qatar and Oslo into this top 20, four centres which also experienced significant progression in terms of both ranks and ratings in GFCI 13. Boston, Tokyo and Kuala Lumpur are the three centres enjoying the greatest progression in terms of reputational advantage, up by 39, 33 and 23 points respectively when compared to GFCI 12. Whilst still retaining a reputational advantage, Seoul's advantage has decreased significantly from 67 in GFCI 12 to 25 in GFCI 13.

"The usual suspects in the list of poor reputations – very hard to build a good reputation and very easy to lose it!"

Commercial Banker based in London

Table 13 | GFCI 13 Bottom 10 centres assessments and ratings – reputational advantage

Centre	Average assessment	GFCI 13 rating	Reputational advantage
Reykjavik	401	546	-145
Tallin	446	589	-143
Athens	335	473	-138
Budapest	407	541	-134
Prague	507	611	-104
St Petersburg	484	585	-101
Glasgow	541	636	-95
Gibraltar	524	615	-91
Beijing	533	622	-89
Moscow	529	606	-77

Table 13 below shows the ten centres with the greatest reputational disadvantage – an indication that respondents' perceptions of a centre are less favourable than the quantitative measures alone would suggest:

It is no surprise to us that Athens and Reykjavik exhibit the most significant reputational disadvantage given how they have been affected by the financial crisis and the Eurozone crisis. Prague and Beijing enter the bottom 10 for reputational advantage, suggesting that their assessment by financial services professionals is more pessimistic than what the instrumental factors reveal. Interestingly, Beijing is also one of the few centres that looses out in terms of both ranking and rating in GFCI 13.

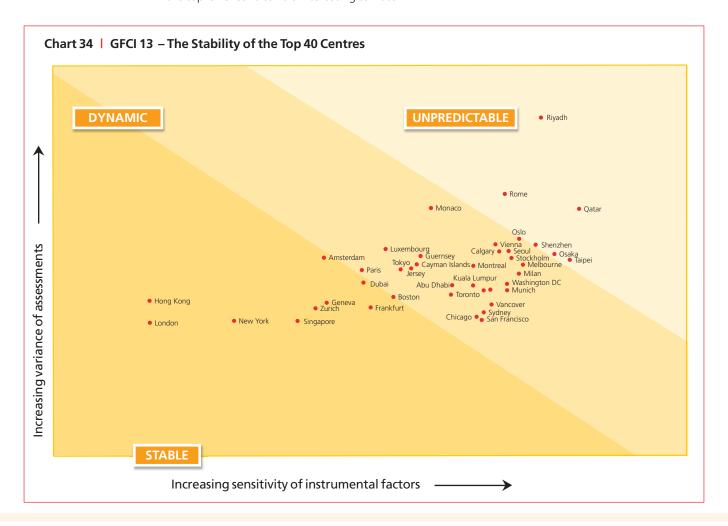
## Stability

The GFCI 13 model allows for analysis of the financial centres with the most volatile competitiveness. Chart 34 below contrasts the 'spread' or variance of the individual assessments given to each of the top 40 centres with the sensitivity to changes in the instrumental factors:

Chart 34 shows three bands of financial centres. The 'unpredictable' centres in the top right of the chart; Riyadh, Rome, Qatar, Monaco, Oslo, Shenzhen, Osaka and Taipei; have a high sensitivity to changes in the instrumental factors and a high variance of assessments. These centres have the highest potential volatility of the top GFCI centres. It is interesting to note

that the centres classed as unpredictable in previous editions of the GFCI have shown the greatest movements in ratings over the past year.

The 'stable' centres in the bottom left of the chart; London, Hong Kong, New York, Singapore, Zurich, Geneva and Frankfurt; have a relatively low sensitivity to changes in the instrumental factors and a low variance of assessments. These centres are likely to exhibit the lowest volatility in future GFCI ratings. Looking back at recent GFCI ratings, the stable centres are fairly consistently towards the top of the GFCI ratings.



# Appendix 1: Assessment Details

Table 14 | Assessment details

Centre	GFCI 13	Number of assessments	Total Average assessment	Standard deviation of assessments
London	807	1,252	839	1.77
New York	787	1,011	834	1.79
Hong Kong	761	876	811	1.83
Singapore	759	759	816	1.78
Zurich	723	673	762	1.87
Tokyo	718	469	770	2.02
Geneva	712	674	739	1.91
Boston	711	491	786	1.94
Seoul	710	291	759	2.20
Frankfurt	703	593	727	1.87
Chicago	698	387	725	1.94
Toronto	696	411	773	1.96
San Francisco	695	252	728	1.80
Washington DC	692	298	706	2.18
Vancouver	690	248	718	1.89
Montreal	689	274	680	2.12
Calgary	688	207	712	2.20
Luxembourg	687	665	736	2.20
Sydney	686	284	715	1.84
Vienna	685	231	732	2.23
Kuala Lumpur	681	227	717	1.99
Osaka	676	88	665	2.17
Dubai	675	596	692	2.02
Shanghai	674	338	693	1.98
Melbourne	672	145	662	2.13
Paris	670	603	674	2.09
Munich	669	253	672	1.99
Jersey	668	463	693	2.09
Oslo	667	163	675	2.26
Qatar	661	186	682	2.41
Guernsey	660	426	707	2.17
Stockholm	657	164	628	2.16
Riyadh	656	131	622	2.82
Amsterdam	655	447	648	2.10
Monaco	654	339	678	2.42
Taipei	653	113	624	2.16
Milan	652	262	653	2.07
Shenzhen	650	125	624	2.23
Abu Dhabi	649	343	624	2.00
Rome	648	239	656	2.48

Centre	GFCI 13	Number of assessments	Total Average assessment	Standard deviation of assessments
Cayman Islands	647	374	639	2.12
Wellington	646	46	609	2.33
Isle of Man	645	393	664	2.18
Sao Paulo	644	132	633	1.98
Copenhagen	643	198	591	2.18
Brussels	641	440	611	2.05
British Virgin Islands	640	373	658	2.30
Rio de Janeiro	639	123	640	2.08
Hamilton	638	248	629	2.06
Glasgow	636	194	551	2.37
Madrid	635	283	613	2.12
Helsinki	634	125	566	2.33
Buenos Aires	633	162	646	2.35
Edinburgh	632	336	600	2.15
Mexico City	628	91	563	2.08
Dublin	627	540	626	1.94
Istanbul	626	156	590	2.32
Beijing	622	373	556	2.32
Bangkok	619	168	576	1.74
Gibraltar	615	296	589	2.47
Prague	611	122	516	2.35
Johannesburg	610	164	571	1.87
Warsaw	608	114	545	2.25
Bahrain	607	204	576	2.11
Moscow	606	404	535	2.12
Mumbai	605	201	555	2.08
Panama	597	172	538	2.40
Malta	595	277	568	2.19
Jakarta	592	108	572	1.94
Mauritius	590	201	545	2.25
Tallinn	589	61	461	2.70
Manila	588	77	508	2.10
Bahamas	587	224	543	2.19
St Petersburg	585	105	490	2.60
Cyprus	576	303	512	2.18
Lisbon	552	134	478	2.26
Reykjavik	546	61	403	2.54
Budapest	541	147	414	2.01
Athens	473	195	340	1.98

# Appendix 2: Respondents' Details

Table 15 | Respondents by industry sector

Sector	Respondents
Banking	371
Government & Regulatory	83
Insurance	94
Other	317
Professional Services	300
Investment	296
Trading	31
Industry	21
Total	1,513

Table 16 | Respondents by size of organisation

Number of staff	Responses
1,000 to 2,000	93
100 to 500	246
2,000 to 5,000	114
500 to 1,000	150
Fewer than 100	534
More than 5,000	372
Unspecified	4
Total	1,513

Table 17 | Respondents by location

Regions	Responses
Europe	551
Middle East/Africa	55
North America	261
Offshore	303
Asia/Pacific	334
Latin America	9
Total	1,513



# Appendix 3: Methodology



The GFCI provides ratings for financial centres calculated by a 'factor assessment model' that uses two distinct sets of input:

- Instrumental factors: objective evidence of competitiveness was sought from a wide variety of comparable sources. For example, evidence about the infrastructure competitiveness of a financial centre is drawn from a survey of property and an index of occupancy costs. Evidence about a fair and just business environment is drawn from a corruption perception index and an opacity index. A total of 96 instrumental factors are used in GFCI 13. Not all financial centres are represented in all the external sources, and the statistical model takes account of these
- Financial centre assessments: by means of an online questionnaire, running continuously since 2007, we use 23,043 financial centre assessments drawn from 2,379 respondents in GFCI 13.

The 96 instrumental factors were selected because the features they measure contribute in various ways to the fourteen competitiveness factors identified in previous research. These are shown below.

Financial centres are added to the GFCI model when they receive five or more mentions in the online questionnaire in response to the question: "Are there any financial centres that might become significantly more important over the next 2 to 3 years?" A centre is only given a GFCI rating and ranking if it receives more than 200 assessments from other centres in the online survey.

At the beginning of our work on the GFCI, a number of guidelines were set out. Additional Instrumental Factors are added to the GFCI model when relevant and meaningful ones are discovered:

### Table 18 | Competitiveness factors and their relative importance

Competitiveness factors	Rank
The availability of skilled personnel	1
The availability of skilled personnel	1
The regulatory environment	2
Access to international financial markets	3
The availability of business infrastructure	4
Access to customers	5
A fair and just business environment	6
Government responsiveness	7
The corporate tax regime	8
Operational costs	9
Access to suppliers of professional services	10
Quality of life	11
Culture & language	12
Quality / availability of commercial property	13

- indices should come from a reputable body and be derived by a sound methodology;
- indices should be readily available (ideally in the public domain) and be regularly updated;
- updates to the indices are collected and collated every six months;
- no weightings are applied to indices;
- indices are entered into the GFCI model as directly as possible, whether this is a rank, a derived score, a value, a distribution around a mean or a distribution around a benchmark;

- if a factor is at a national level, the score will be used for all centres in that country; nationbased factors will be avoided if financial centre (city)-based factors are available;
- if an index has multiple values for a city or nation, the most relevant value is used (and the method for judging relevance is noted);
- if an index is at a regional level, the most relevant allocation of scores to each centre is made (and the method for judging relevance is noted):
- if an index does not contain a value for a particular city, a blank is entered against that centre (no average or mean is used). Only indices which have values for at least 50% of the financial centres (currently 40) will be included.

Creating the GFCI does not involve totaling or averaging scores across instrumental factors. An approach involving totaling and averaging would involve a number of difficulties:

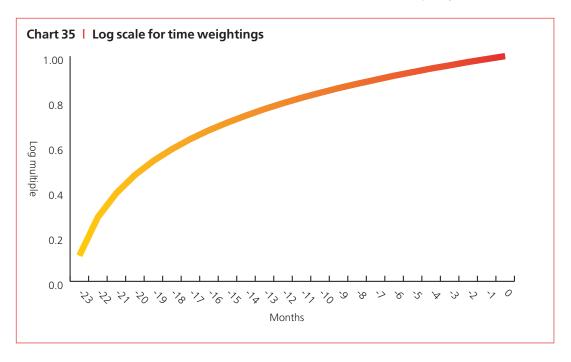
- indices are published in a variety of different forms: an average or base point of 100 with scores above and below this; a simple ranking; actual values (e.g. \$ per square foot of occupancy costs); a composite 'score';
- indices would have to be normalised, e.g. in some indices a high score is positive while in others a low score is positive;

- not all centres are included in all indices;
- the indices would have to be weighted.

The guidelines for financial centre assessments by respondents are:

- responses are collected via an online questionnaire which runs continuously. A link to this guestionnaire is emailed to the target list of respondents at regular intervals and other interested parties can fill this in by following the link given in the GFCI publications;
- financial centre assessments will be included in the GFCI model for 24 months after they have been received;
- respondents rating fewer than 3 or more than half of the centres are excluded from the model:
- respondents who do not say where they work are excluded:
- financial centre assessments from the month when the GFCI is created are given full weighting and earlier responses are given a reduced weighting on a log scale.

The financial centre assessments and instrumental factors are used to build a predictive model of centre competitiveness using a support vector machine (SVM). The SVM used for the GFCI is PropheZy – Z/Yen's



proprietary system. SVMs are based upon statistical techniques that classify and model complex historic data in order to make predictions of new data. SVMs work well on discrete, categorical data but also handle continuous numerical or time series data. The SVM used for the GFCI provides information about the confidence with which each specific classification is made and the likelihood of other possible classifications.

A factor assessment model is built using the centre assessments from responses to the online questionnaire. Assessments from respondents' home centres are excluded from the factor assessment model to remove home bias. The model then predicts how respondents would have assessed centres they are not familiar with, by answering questions such as:

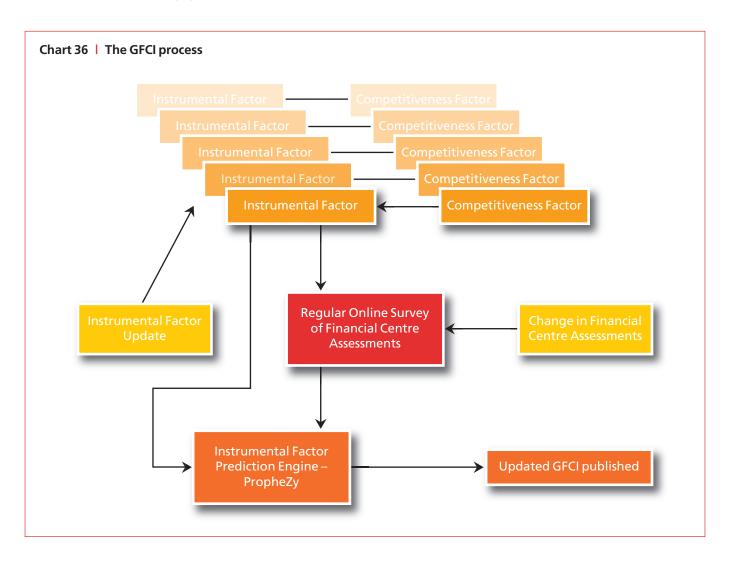
If an investment banker gives Singapore and Sydney certain assessments then, based on the relevant data for Singapore, Sydney and Paris, how would that person assess Paris?

Or

If a pension fund manager gives Edinburgh and Munich a certain assessment then, based on the relevant data for Edinburgh, Munich and Zurich, how would that person assess Zurich?

Financial centre predictions from the SVM are re-combined with actual financial centre assessments (except those from the respondents' home centres) to produce the GFCI – a set of financial centre ratings. The GFCI is dynamically updated either by updating and adding to the instrumental factors or through new financial centre assessments. These updates permit, for instance, a recently changed index of rental costs to affect the competitiveness rating of the centres.

The process of creating the GFCI is outlined diagrammatically below.



It is worth drawing attention to a few consequences of basing the GFCI on instrumental factors and questionnaire responses.

- several indices can be used for each competitive factor;
- a strong international group of 'raters' has developed as the GFCI progresses;
- sector-specific ratings are available using the business sectors represented by questionnaire respondents. This makes it possible to rate London as competitive in Insurance (for instance) while less competitive in Investment Management (for instance);
- the factor assessment model can be queried in a 'what if' mode – "how much would London rental costs

Part of the process of building the GFCI is extensive sensitivity testing to changes in factors of competitiveness and financial centre assessments. There are over ten million data points in the current model. The accuracy of predictions given by the SVM are regularly tested against actual assessments.



# Appendix 4: Instrumental Factors

Table 19 shows how closely instrumental factor rankings correlate with the GFCI 13 rankings for the top 20 instrumental factors:

It is interesting (but perhaps unsurprising) to see that the broader measures of competitiveness seem to act as good indicators for financial centre competitiveness. The top four of the most highly correlated instrumental factors are all broad measures of competitiveness rather than being specific to financial services. This indicates that cities that are successful at most things are likely to be very competitive financial centres. A full list of instrumental factors is shown opposite.

Table 19 | Top 25 instrumental factors by correlation with GFCI 13

Instrumental factor	Correlation measured by R <sup>2</sup>
Global Power City Index	0.509
World Competitiveness Scoreboard	0.491
Global City Competitiveness	0.481
Global Competitiveness Index	0.465
Banking Industry Country Risk Assessment	ts 0.464
Office Occupancy Costs	0.443
Global Cities Index	0.443
City Global Image	0.395
Connectivity	0.371
Commodity Futures Notional Turnover	0.348
Citizens Domestic Purchasing Power	0.336
Price Levels	0.325
Business Environment	0.319
Capital Access Index	0.318
IT Industry Competitiveness	0.290
Physical Capital	0.286
Innovation Cities Global Index	0.283
Wage Comparison Index	0.280
Financial Secrecy Index	0.280
GDP per Person Employed	0.268
Global Innovation Index	0.267
Global Intellectual Property Index	0.264
Infrastructure	0.258
Political Risk	0.256
Global Talent Index	0.256



Table 20 | People related instrumental factors

Instrumental factor	Source	Website	Updated since GFCI 12
Graduates in Social Science Business and Law	World Bank	www.worldbank.org/education	✓
Gross Tertiary Education Ratio	World Bank	www.worldbank.org/education	✓
Visa Restrictions Index	Henley & Partners	www.henleyglobal.com/citizenship/ visa-restrictions/	<b>√</b>
Human Development Index	UN Development Programme	hdr.undp.org	
Citizens Purchasing Power	UBS	www.ubs.com/1/e/ubs_ch/wealth_mgmt_ch/ research.html	✓
Quality of Living Survey	Mercer HR	www.mercerhr.com	✓
Happy Planet Index	New Economics Foundation (NEF)	www.happyplanetindex.org/explore/global/index.html	
Number of High Net Worth Individuals	City Bank & Knight Frank	www.knightfrank.com/wealthreport/	
Personal Safety Index	Mercer HR	www.mercerhr.com	
Homicide Rates	UN Office of Drugs and Crime	www.unodc.org/unodc/en/data-and-analysis/	
World's Top Tourism Destinations	Euromonitor Archive	www.euromonitor.org	✓
Average Days with Precipitation per Year	Sperling's Best Places	www.bestplaces.net	
Spatial Adjusted Liveability Index	EIU	pages.eiu.com/rs/eiu2/images/EIU_BestCities.pdf	
Human Capital	EIU	www.managementthinking.eiu.com/	
Global Talent Index	EIU	www.managementthinking.eiu.com/ global-talent-index-2011-2015.html	New
Citywide CO2 Emissions	Carbon Disclosure Project	www.cdproject.net/en-US/Results/Pages/ reports.aspx	New
Healthcare	EIU	pages.eiu.com/rs/eiu2/images/EIU_BestCities.pdf	New



Table 21 | Business environment related instrumental factors

Instrumental factor	Source	Website	Updated since GFCI 12
Business Environment	EIU	www.economist.com/markets/rankings	✓
Ease of Doing Business Index	The World Bank	www.doingbusiness.org/economyrankings	✓
Operational Risk Rating	EIU	http://www.viewswire.com/index.asp? layout=homePubTypeRK	✓
Real Interest Rate	World Bank	http://data.worldbank.org/indicator/FR.INR.RINR	✓
Projected City Economic Growth	McKinsey Institute	www.foreignpolicy.com/articles/2012/08/13/ the_most_dynamic_cities_of_2025	New
Global Services Location Index	AT Kearney	www.atkearney.com	
Corruption Perceptions Index	Transparency International	www.transparency.org/publications	✓
Wage Comparison Index	UBS	www.ubs.com	✓
Corporate Tax Rates	Price Waterhouse Coopers	n/a	✓
Employee Effective Tax Rates	Price Waterhouse Coopers	n/a	
Personal Tax Rates	OECD	www.oecd.org	✓
Total Tax Receipts (as % of GDP)	OECD	http://oberon.sourceoecd.org	✓
Bilateral Tax Information Exchange Agreements	OECD	http://www.oecd.org	✓
Economic Freedom of the World	Fraser Institute	www.freetheworld.com/release.html	✓
Banking Industry Country Risk Assessments	Standard & Poor	http://www2.standardandpoors.com	
Government Debt as Percentage of GDP	CIA World Fact Book	https://www.cia.gov/library/publications/the- world-factbook/rankorder/2186rank.html	✓
Political Risk Index	Exclusive Analysis Ltd	http://www.exclusive-analysis.com/	
Global Peace Index	Institute for Economics and Peace	http://www.visionofhumanity.org/info- center/global-peace-index-2011/	
Financial Secrecy Index	Tax Justice Network	http://www.financialsecrecyindex.com/	
Institutional Effectiveness	EIU	http://www.managementthinking.eiu.com/	
City GDP Figures	Brookings Institute	http://www.brookings.edu/~/media/research/	✓
Number of Greenfield Investments	KPMG	http://www.kpmg.com/FR/fr/lssuesAndInsights/News/Documents/GPIA-KPMG-CIM-2012.pdf	New



Table 22 | Market Access Related Instrumental Factors

Instrumental factor	Source	Website	Updated since GFCI 12
Capital Access Index	Milken Institute	www.milkeninstitute.org/research	
Securitisation	International Financial Services London (IFSL)	www.ifsl.org.uk	
Capitalisation of Stock Exchanges	World Federation of Stock Exchanges	www.world-exchanges.org	✓
Value of Share Trading	World Federation of Stock Exchanges	www.world-exchanges.org	✓
Volume of Share Trading	World Federation of Stock Exchanges	www.world-exchanges.org	✓
Broad Stock Index Levels	World Federation of Stock Exchanges	www.world-exchanges.org	✓
/alue of Bond Trading	World Federation of Stock Exchanges	www.world-exchanges.org	✓
/olume of Stock Options Trading	World Federation of Stock Exchanges	www.world-exchanges.org	✓
Volume of Stock Futures Trading	World Federation of Stock Exchanges	www.world-exchanges.org	✓
Domestic Credit Provided by Banks (% GDP)	World Bank	http://data.worldbank.org/indicator/ FS.AST.DOMS.GD.ZS	✓
Percentage of Firms Using Bank Credit to Finance Investment	World Bank	http://data.worldbank.org/indicator/ IC.FRM.BNKS.ZS	
Total Net Assets of Mutual Funds	Investment Company Institute	http://www.icifactbook.org/	
slamic Finance	IFSL	http://www.thecityuk.com/what-we-do/ the-research-centre/reports.aspx	
Net External Position of Banks	Bank for International Settlements	http://www.bis.org/statistics/bankstats.htm	✓
External Position of Central Banks (as % GDP)	Bank for International Settlements	http://www.bis.org/statistics/bankstats.htm	✓
iner Shipping Connectivity	The World Bank	http://data.worldbank.org/indicator/ IS.SHP.GCNW.XQ	
Commodity Options Notional Turnover	World Federation of Stock Exchanges	www.world-exchanges.org	✓
Commodity Futures Notional Turnover	World Federation of Stock Exchanges	www.world-exchanges.org	✓
Global Connectedness Index	DHL	http://www.dhl.com/en/about_us/ logistics_insights/global_connectedness_ index_2012/gci_results.html	New

Table 23 | Infrastructure Related Instrumental Factors

Instrumental factor	Source	Website	Updated since GFCI 12
Office Occupancy Costs	DTZ	http://www.dtz.com/Global/Research/	
Office Space Across the World	Cushman & Wakefield	www.cushwake.com/cwglobal	
Global Property Index	Investment Property Databank	http://www.ipd.com/	✓
Real Estate Transparency Index	Jones Lang LaSalle	www.joneslanglasalle.co.uk	✓
Digital Economy Ranking	EIU	www.economist.com/markets/rankings	
Telecommunication Infrastructure Index	United Nations	http://www.unpan.org/egovkb/global_reports/ 08report.htm	
Quality of Ground Transport Network	World Economic Forum	http://www.weforum.org/en/initiatives/gcp/ TravelandTourismReport	
Quality of Roads	World Economic Forum	http://www.weforum.org/en/initiatives/gcp/ TravelandTourismReport	
Roadways per Land Area	CIA World Fact Book	https://www.cia.gov/library/publications/ the-world-factbook/rankorder/2085rank.html	
Railways per Land Area	CIA World Fact Book	https://www.cia.gov/library/publications/ the-world-factbook/rankorder/2121rank.html	
Physical Capital	EIU	http://www.managementthinking.eiu.com/	
Connectivity	EIU	http://pages.eiu.com/rs/eiu2/images/ EIU_BestCities.pdf	
IT Industry Competitiveness	BSA/EIU	http://globalindex11.bsa.org/country-table/	
Energy Sustainability Index	World Energy Council	http://www.worldenergy.org/publications/ 3962.asp	New
City Infrastructure	EIU	http://pages.eiu.com/rs/eiu2/images/ EIU_BestCities.pdf	New
Urban Sprawl	EIU	http://pages.eiu.com/rs/eiu2/images/ EIU_BestCities.pdf	New
Metro Network Length	Metro Bits	http://mic-ro.com/metro/table.html	New

Table 24 | General Competitiveness related instrumental factors

Instrumental factor	Source	Website	Updated since GFCI 12
World Competitiveness Scoreboard	IMD	www.imd.ch/research	
Global Competitiveness Index	World Economic Forum	www.weforum.org	✓
Global Business Confidence	Grant Thornton	www.grantthorntonibos.com	✓
Foreign Direct Investment Inflows	UNCTAD	http://www.unctad.org	✓
FDI Confidence	AT Kearney	http://www.atkearney.com/images/global/pdf/ Investing_in_a_Rebound-FDICI_2010.pdf	
City to Country GDP Ratio	World Bank Price Waterhouse Cooper	https://www.ukmediacentre.pwc.com/content/detail.aspx?releaseid=3421&newsareaid=2	✓
GDP per Person Employed	World Bank	http://data.worldbank.org/indicator/ SL.GDP.PCAP.EM.KD	✓
Global Innovation Index	INSEAD/WIPO	http://www.globalinnovationindex.org/gii/	
Global Intellectual Property Index	Taylor Wessing	http://www.taylorwessing.com/ipindex/	
Retail Price Index	The Economist	www.economist.com/markets/indicators	✓
Price Levels	UBS	http://www.ubs.com/1/e/wealthmanagement/ wealth_management_research/prices_earn- ings.html	✓
Global Power City Index	Institute for Urban Strategies & Mori Me- morial Foundation	http://www.mori-m- foundation.or.jp/english/index.shtml	
Global Cities Index	AT Kearney	http://www.foreignpolicy.com/story/cms.php? story_id=4509	
Number of International Fairs & Exhibitions	World Economic Forum	http://www.weforum.org/en/initiatives/gcp/ TravelandTourismReport	
Innovation Cities Global Index	2thinknow Innovation Cities™ Project	http://www.innovation-cities.com/innovation- cities-global-index-2010-city-rankings/	
City Global Appeal	EIU	http://www.managementthinking.eiu.com/	
Global City Competitiveness	EIU	http://www.managementthinking.eiu.com/	
The Big Mac Index	The Economist	http://www.economist.com/blogs/graphicde- tail/2012/01/daily-chart-3	
City Global Image	KPMG	http://www.kpmg.com/FR/fr/IssuesAndInsights/ News/Documents/GPIA-KPMG-CIM-2012.pdf	New
City's Weight in National Incoming Invest- ments	KPMG	http://www.kpmg.com/FR/fr/IssuesAndInsights/ News/Documents/GPIA-KPMG-CIM-2012.pdf	New
Sustainable Economic Development	Boston Consulting Group	https://www.bcgperspectives.com/content/ interactive/public_sector_globalization_interac- tive_map_sustainable_economic_development/	New



### Long Finance

Established in 2007 by Z/Yen Group in conjunction with Gresham College, the Long Finance initiative began with a conundrum – "when would we know our financial system is working?" Long Finance aims to "improve society's understanding and use of finance over the long term" in contrast to the short-termism that defines today's financial and economic views.

Long Finance publishes papers under the Financial Centre Futures series in order to initiate discussion on the changing landscape of global finance. Financial Centre Futures consists of indepth research as well as the popular Global Financial Centres Index (GFCI). Long Finance has initiated two other publication series: Eternal Brevities and Finance Shorts. Long Finance is a community which can be explored and joined at www.longfinance.net.

### FINANCIAL CENTRE FUTURES IS SPONSORED BY



### www.qfc.com.qa

The Qatar Financial Centre is a financial centre established by the government of Qatar in 2005 to attract international financial services

### AND PRODUCED BY



The Z/Yen Group

### www.zyen.com

As the City of London's leading commercial think-tank, Z/Yen helps organisations make better choices.

Price: £10

ISBN: 978-0-9573601-2-9



www.longfinance.net