



Intellectual Capital for Communities
In the Knowledge Economy

Intellectual Capital for Communities in the Knowledge Economy Nations, Regions, Cities and Emerging Communities

Cities of Opportunity
Hazem Galal, PwC

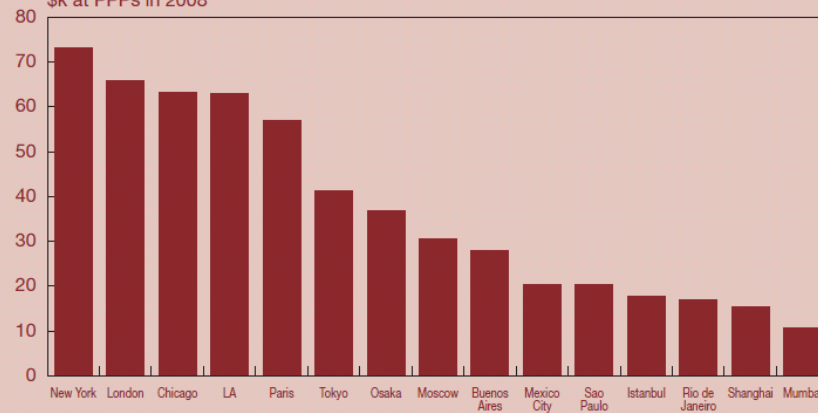


26&27 May 2011

World Conference on Intellectual Capital for Communities
- Seventh Edition -

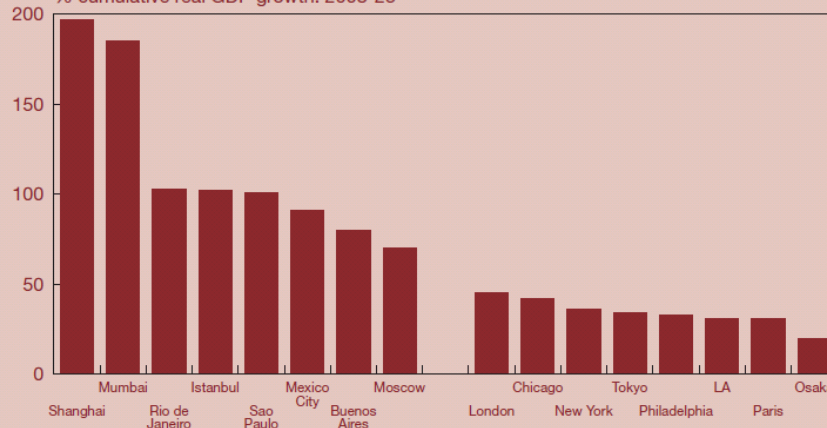
Growth in cities from emerging economies will substantially outpace developed ones

Figure 3.3 – Estimated GDP per capita in 2008 in selected major cities
\$k at PPPs in 2008



Source: PwC estimates based on OECD, World Bank and national data sources

Figure 3.4 – Cumulative projected GDP growth to 2025 for mega-cities
% cumulative real GDP growth: 2008-25



Top 8 emerging economy and Top 8 advanced economy cities

Source: PwC analysis

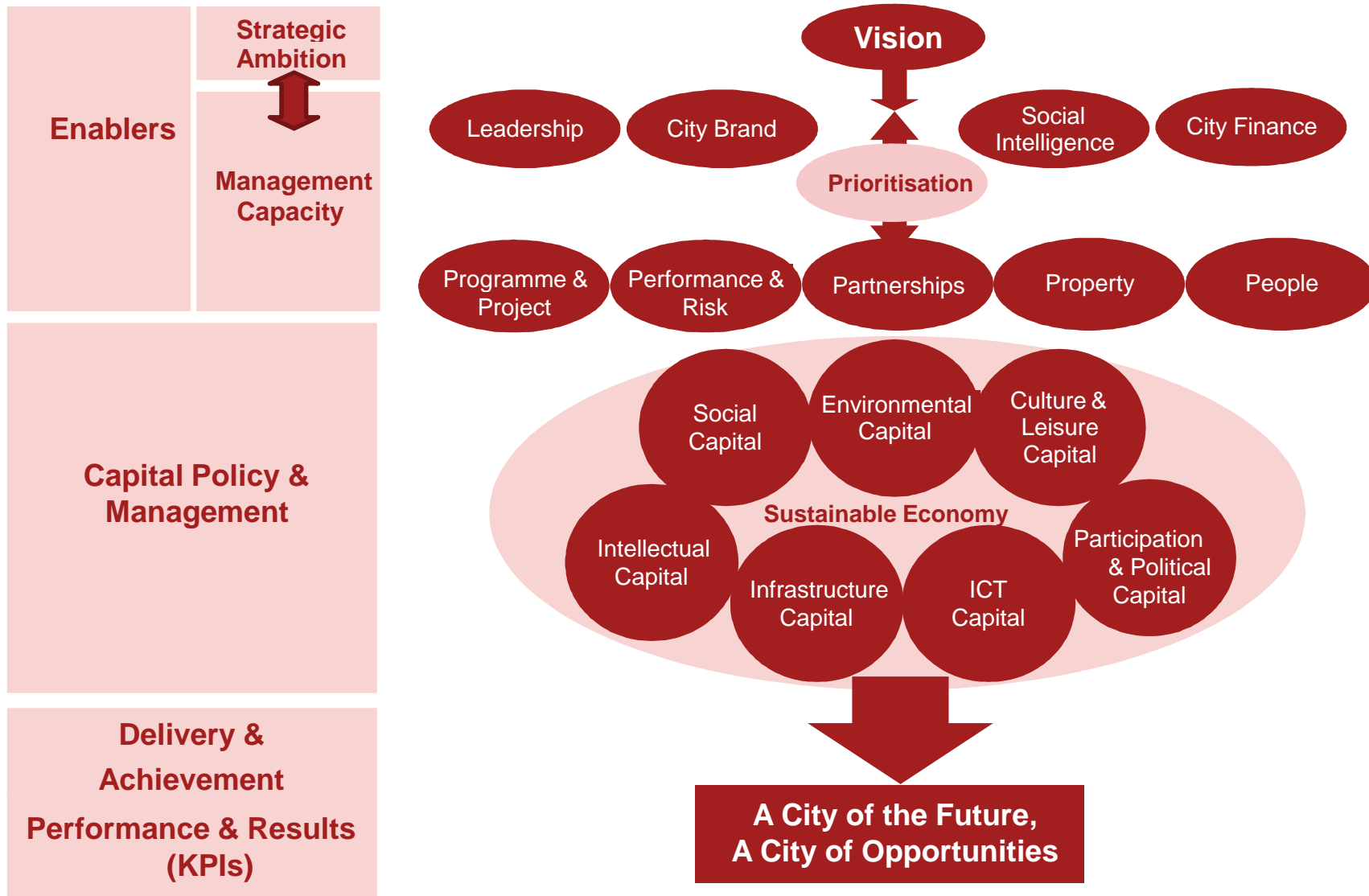
Table 3.6 – Top 30 urban agglomerations by estimated GDP in 2025 using UN population definitions and projections

2025 GDP rank (2008 in brackets)	City	Estimated GDP in 2025 (\$bn at 2008 PPPs)	Population in 2025 (millions)	Average real GDP growth (% pa: 2008-2025)
1 (1)	Tokyo	1981	36.40	1.7%
2 (2)	New York	1915	20.63	1.8%
3 (3)	Los Angeles	1036	13.67	1.6%
4 (5)	London	821	8.62	2.2%
5 (4)	Chicago	817	9.93	2.1%
6 (10)	Sao Paulo ▲	782	21.43	4.2%
7 (8)	Mexico City	745	21.01	3.9%
8 (6)	Paris	741	10.04	1.6%
9 (25)	Shanghai ▲	692	19.41	6.6%
10 (13)	Buenos Aires	651	13.77	3.5%
11 (29)	Mumbai (Bombay) ▲	594	26.39	6.3%
12 (15)	Moscow	546	10.53	3.2%
13 (9)	Philadelphia	518	6.13	1.7%
14 (16)	Hong Kong	506	8.31	2.7%
15 (11)	Washington DC	504	4.89	1.8%
16 (7)	Osaka/Kobe	500	11.37	1.1%
17 (38)	Beijing ▲	499	14.55	6.7%
18 (12)	Boston	488	5.03	1.8%
19 (37)	Delhi ▲	482	22.50	6.4%
20 (14)	Dallas/Fort Worth	454	5.42	1.8%
21 (44)	Guangzhou ▲	438	11.84	6.8%
22 (21)	Seoul	431	9.74	2.3%
23 (17)	Atlanta	412	5.15	1.8%
24 (30)	Rio de Janeiro ▲	407	13.41	4.2%
25 (18)	San Francisco/Oakland	406	3.90	1.8%
26 (19)	Houston	400	5.05	1.8%
27 (20)	Miami	390	6.27	1.7%
28 (34)	Istanbul ▲	367	12.10	4.2%
29 (22)	Toronto	352	5.95	2.0%
30 (42)	Cairo ▲	330	15.56	5.0%

▲ Rising by more than 3 places

Source: PricewaterhouseCoopers projections

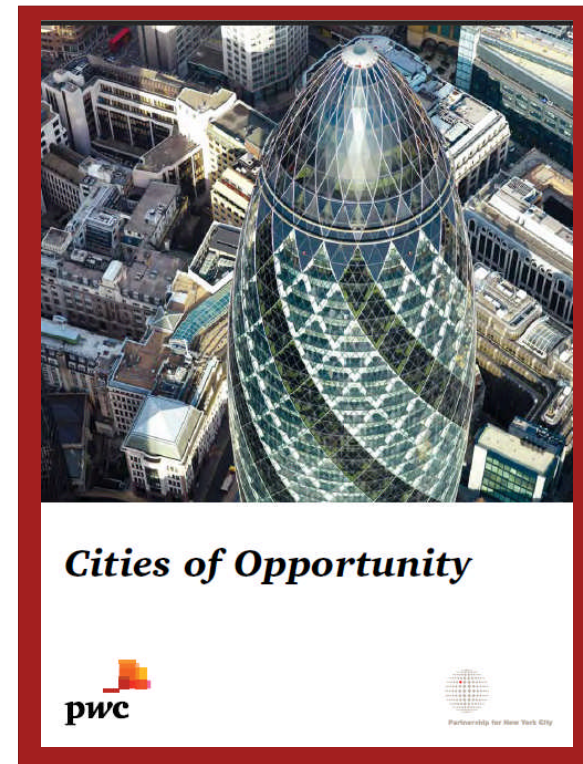
PwC's holistic approach to sustainable socioeconomic development is our key differentiator



Cities of Opportunity is a highly visible thought leadership initiative reflecting PwC's views on cities

Central thesis: “The more well-balanced a city is for both businesses and residents, the better it will fare”

- Reflects PwC's holistic approach to city management
- The report in its fourth edition is produced by PwC with support from the global network and the ISU and in cooperation with the Partnership for New York City.
- Takes both a quantitative and qualitative look at the emerging picture of city life in 21 capitals of business, finance and culture worldwide.
- To a great extent, the successes and shortcomings that surface in the study substantiate the central thesis of the research.
- Cities of Opportunity may prove most useful for government officials, policymakers and business persons as a good orientation point on the move toward a city-centered world.
- The study takes notice of the actions and policies that are working best for the common good, and its insights will prove valuable in that context.



Cities of Opportunity 2011 included 26 Cities across 20 countries



While New York led the overall ranking, Beta cities did extremely well

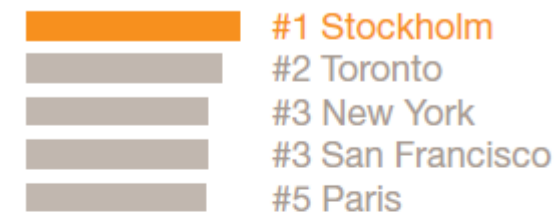
Indicator	Best performing cities		
Intellectual capital and innovation	Stockholm	Toronto	New York
Technology readiness	New York	Seoul	Stockholm
Transportation and infrastructure	Paris	Chicago	New York
Demographics and livability	Stockholm	Sydney	Toronto
Economic Clout	London	Paris	New York
Cost	Houston	Los Angeles	Chicago
Lifestyle Assets	New York	Paris	London
Health, safety and security	Stockholm	Toronto	Chicago
Ease of doing business	Hong Kong	Singapore	New York
Sustainability	Berlin	Sydney	Stockholm

In 2011, Stockholm finishes fourth out of 26 cities in the ranking this year, and top among European capitals

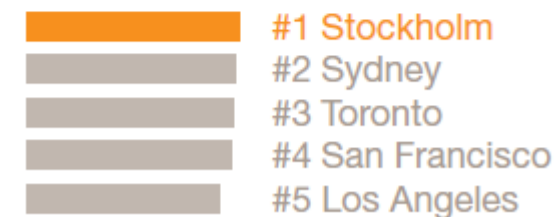
Stockholm tops the charts in many categories deemed critical to a world class city, including innovation and intellectual capital

- Stockholm moves up five places from last year, finishing just behind New York, San Francisco and Toronto and just above Sydney
- Offers a balanced and “livable” city attracting a highly qualified workforce; similar to other “beta cities” such as Toronto, San Francisco, Sydney and Chicago.
- Shows cities worldwide how empowering advances in intellectual capital can develop an environment where original ideas and action keep the city moving forward.
- Investments, R&D and support for entrepreneurs all contribute to the city’s ability to generate and diffuse knowledge.
- Performs uniformly well in data variables such as housing, quality of life, life satisfaction, and commute time.

Intellectual capital and innovation



Demographics and livability



We used nine indicators for the innovation and intellectual capital component of the report

	Classroom size ¹	Libraries with public access	Math/science skills attainment	Literacy and enrollment ²	Percent of population with higher education	Research performance of top universities	Percent of gross domestic expenditure on R&D	Intellectual property protection	Entrepreneurial environment	Score
26 Stockholm	20	25	16	25	24	17	26	26	25	205
25 Toronto	25	21	23	24	21	16	14	22	20	186
24 New York	15	15	12	22	20	26	23	16	25	174
24 San Francisco	19	18	12	22	26	13	23	16	25	174
23 Paris	17	16	15	23	25	19	15	34	18	172
21 Los Angeles	22	11	12	22	16	22	23	16	25	169
20 Tokyo	9	19	22	17	22	24	25	17	13	168
20 Sydney	14	26	19	25	11	15	16	21	20	168
20 Houston	21	12	12	22	14	23	23	16	25	168
17 Chicago	13	17	12	22	18	20	23	16	25	166
18 London	12	24	17	15	19	25	13	20	16	162
16 Berlin	18	20	18	15	13	14	18	23	10	149
14 Seoul	6	4	24	13	15	21	24	9	14	130
13 Madrid	24	13	14	14	17	9	10	10	9	120
12 Singapore	5	5	26	8	7	10	17	25	16	119
11 Hong Kong	7	9	25	9	8	18	6	19	17	118
10 Moscow	26	22	7	12	23	5	9	1	2	107
9 Shanghai	3	8	21	3	12	8	12	8	8	83
8 Beijing	3	1	21	3	10	11	12	8	8	77
8 Mexico City	23	23	4	6	6	6	2	4	3	77
6 Abu Dhabi	15	7	2	7	9	1	1	18	13	74
6 Santiago	8	10	6	11	3	7	4	6	13	68
4 São Paulo	11	6	3	10	4	12	8	3	1	58
3 Johannesburg	4	14	1	5	1	3	7	11	5	51
2 Mumbai	1	3	13	1	5	4	5	5	4	41
1 Istanbul	10	2	5	4	2	2	3	2	8	38

Each city's score (here 205 to 38) is the sum of its rankings across variables. The city order from 26 to 1 is based on these scores. See maps on pages 18–19 for an overall indicator comparison.

1. Where average class size data were unavailable, pupil-teacher ratios, or the number of students divided by the number of teachers in primary education, were used as substitutes.

2. The World Bank's Knowledge Index (KI) measures a country's ability to generate, adopt and diffuse knowledge. This is an indication of overall potential of knowledge development in a given country. The KI is derived by averaging a country's normalized

performance scores on the key variables in three Knowledge Economy pillars—education and human resources, the innovation system, and information and communication technology (ICT). The variables that comprise education and human resources are adult literacy rate, secondary education enrollment and tertiary education enrollment.

■ High
■ Medium
■ Lowest rank in each variable
■ Low

As a smaller city in terms of land and population, Stockholm blends into the middle of the list when assessing economic scale and power

- How can an innovative city like Stockholm maintain its future competitive advantage despite some worrying signals for future generations?
- What are opportunities for Stockholm to leverage its innovative strengths to increase economic competitiveness?
- How can other cities in Sweden, Europe and globally leverage its experience?



We are developing jointly with the New Club of Paris a more in-depth innovation index for cities

Thank you
hazem.galal@br.pwc.com

© 2011 PricewaterhouseCoopers Brasil. Todos os direitos reservados.
Neste documento, "PwC" refere-se à PricewaterhouseCoopers Brasil,
firma membro da PricewaterhouseCoopers International Limited,
constituindo-se cada firma membro da PricewaterhouseCoopers
International Limited pessoa jurídica separada e independente.