

# The Global Innovation Index 2013

The Local Dynamics of Innovation

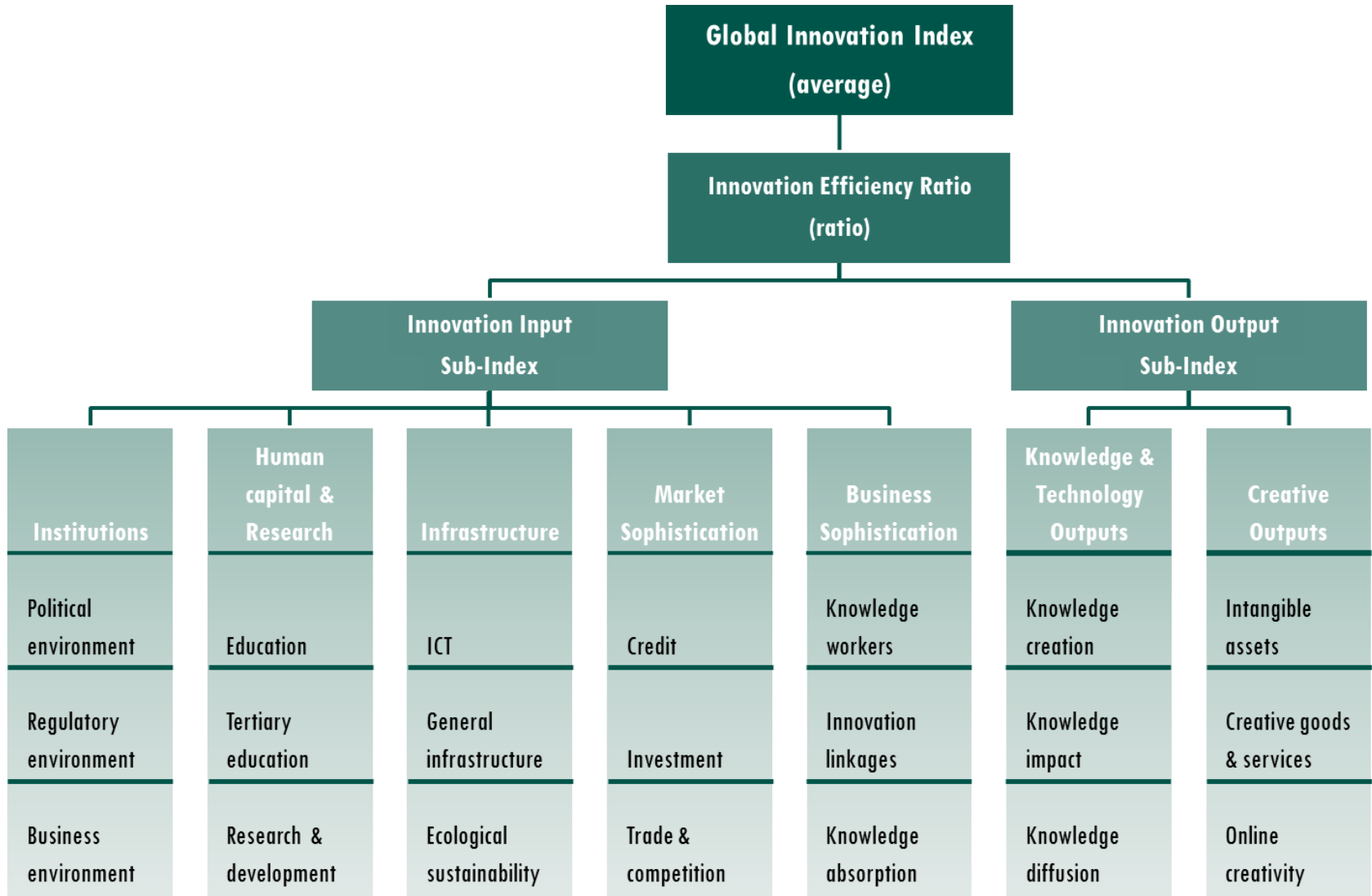


## **MENA Launch** Abu Dhabi, 3 July 2013

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# A tool for action around 84 metrics



# The GII is a multi-stakeholder effort

Co-published by Cornell University, INSEAD and WIPO

Four Knowledge Partners: Booz & Company, the Confederation of Indian Industry, du, and Huawei

Independent statistical audit by the Joint Research Centre of the European Commission

International advisory board



# The GII 2013 – Main results

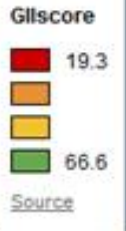
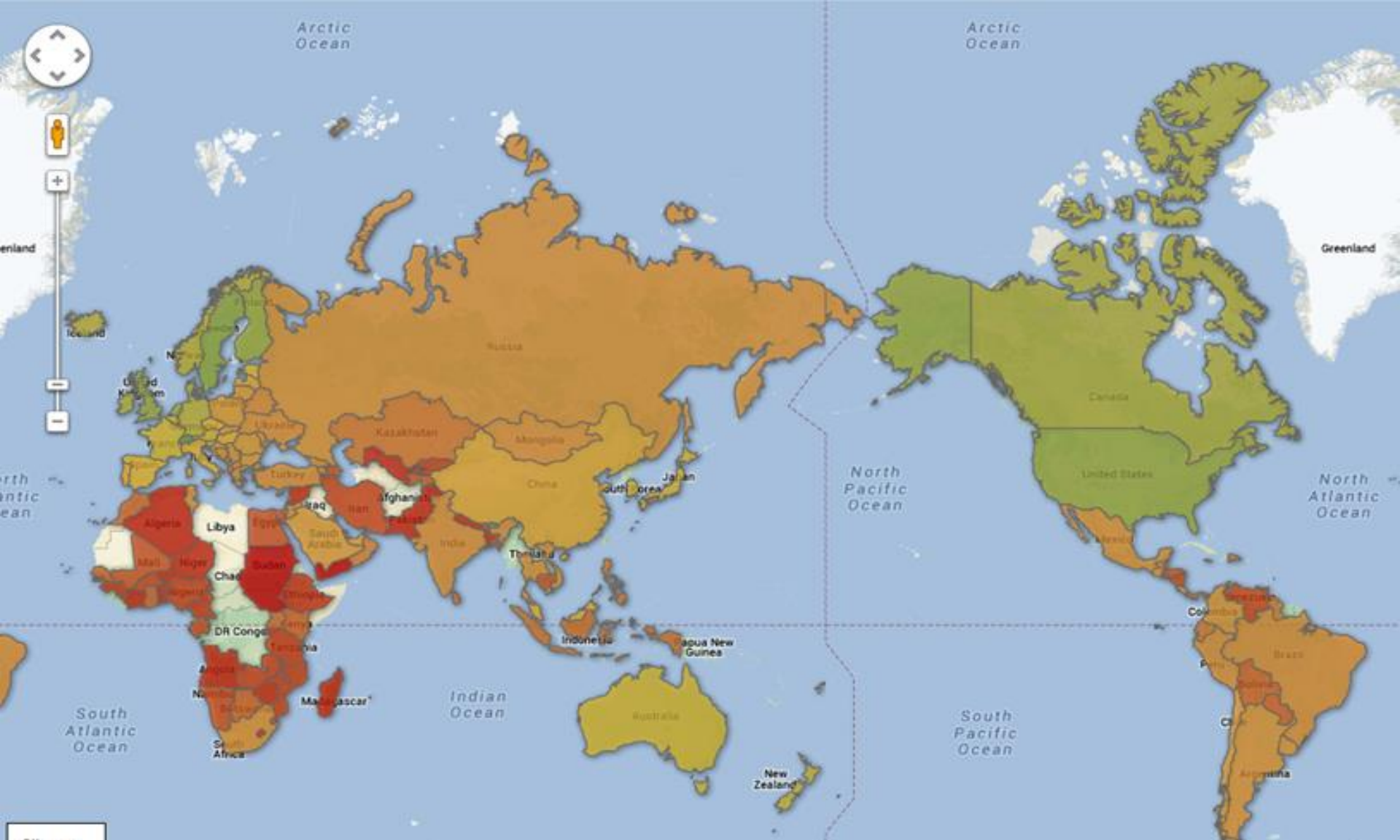
- Innovation is a global game
- An innovation divide persists
- Local dynamics are key
- Policy implications emerge

# GII 2013 rankings – Top 10

Input Sub-Index	Output Sub-Index	Efficiency Ratio	GII
<ol style="list-style-type: none"> <li>1. Singapore</li> <li>2. Hong Kong (China)</li> <li>3. United States of America</li> <li>4. United Kingdom</li> <li>5. Sweden</li> <li>6. Finland</li> <li>7. Switzerland</li> <li>8. Denmark</li> <li>9. Canada</li> <li>10. Netherlands</li> </ol>	<ol style="list-style-type: none"> <li>1. Switzerland</li> <li>2. Netherlands</li> <li>3. Sweden</li> <li>4. United Kingdom</li> <li>5. Malta</li> <li>6. Luxembourg</li> <li>7. Iceland</li> <li>8. Finland</li> <li>9. Israel</li> <li>10. Germany</li> </ol>	<ol style="list-style-type: none"> <li>1. Mali</li> <li>2. Moldova, Rep.</li> <li>3. Guinea</li> <li>4. Malta</li> <li>5. Swaziland</li> <li>6. Indonesia</li> <li>7. Nigeria</li> <li>8. Kuwait</li> <li>9. Costa Rica</li> <li>10. Venezuela, Bolivarian Rep.</li> </ol>	<ol style="list-style-type: none"> <li>1. Switzerland</li> <li>2. Sweden</li> <li>3. United Kingdom</li> <li>4. Netherlands</li> <li>5. United States of America</li> <li>6. Finland</li> <li>7. Hong Kong (China)</li> <li>8. Singapore</li> <li>9. Denmark</li> <li>10. Ireland</li> </ol>

# MENA rankings

Input Sub-Index	Output Sub-Index	Efficiency ratio	Global Innovation Index
1. UAE (26)	1. Kuwait (36)	1. Kuwait (36)	1. UAE (38)
2. Qatar (38)	2. Saudi Arabia (44)	2. Tunisia (59)	2. Saudi Arabia (42)
3. Saudi Arabia (44)	3. Qatar (52)	3. Saudi Arabia (44)	3. Qatar (43)
4. Bahrain (47)	4. Tunisia (59)	4. Jordan (63)	4. Kuwait (50)
5. Oman (53)	5. Jordan (63)	5. Morocco (99)	5. Jordan (61)
6. Lebanon (56)	6. UAE (81)	6. Qatar (52)	6. Bahrain (67)
7. Jordan (61)	7. Lebanon (88)	7. Iran (120)	7. Tunisia (70)
8. Kuwait (74)	8. Bahrain (90)	8. Egypt (112)	8. Lebanon (75)
9. Tunisia (80)	9. Morocco (99)	9. Lebanon (88)	9. Oman (80)
10. Morocco (90)	10. Oman (111)	10. Bahrain (90)	10. Morocco (92)
11. Egypt (101)	11. Egypt (112)	11. Yemen (139)	11. Egypt (108)
12. Syria (105)	12. Iran (120)	12. UAE (81)	12. Iran (113)
13. Iran (107)	13. Yemen (139)	13. Oman (111)	13. Syria (134)
14. Algeria (112)	14. Syria (140)	14. Algeria (141)	14. Algeria (138)
15. Yemen (141)	15. Algeria (141)	15. Syria (140)	15. Yemen (142)

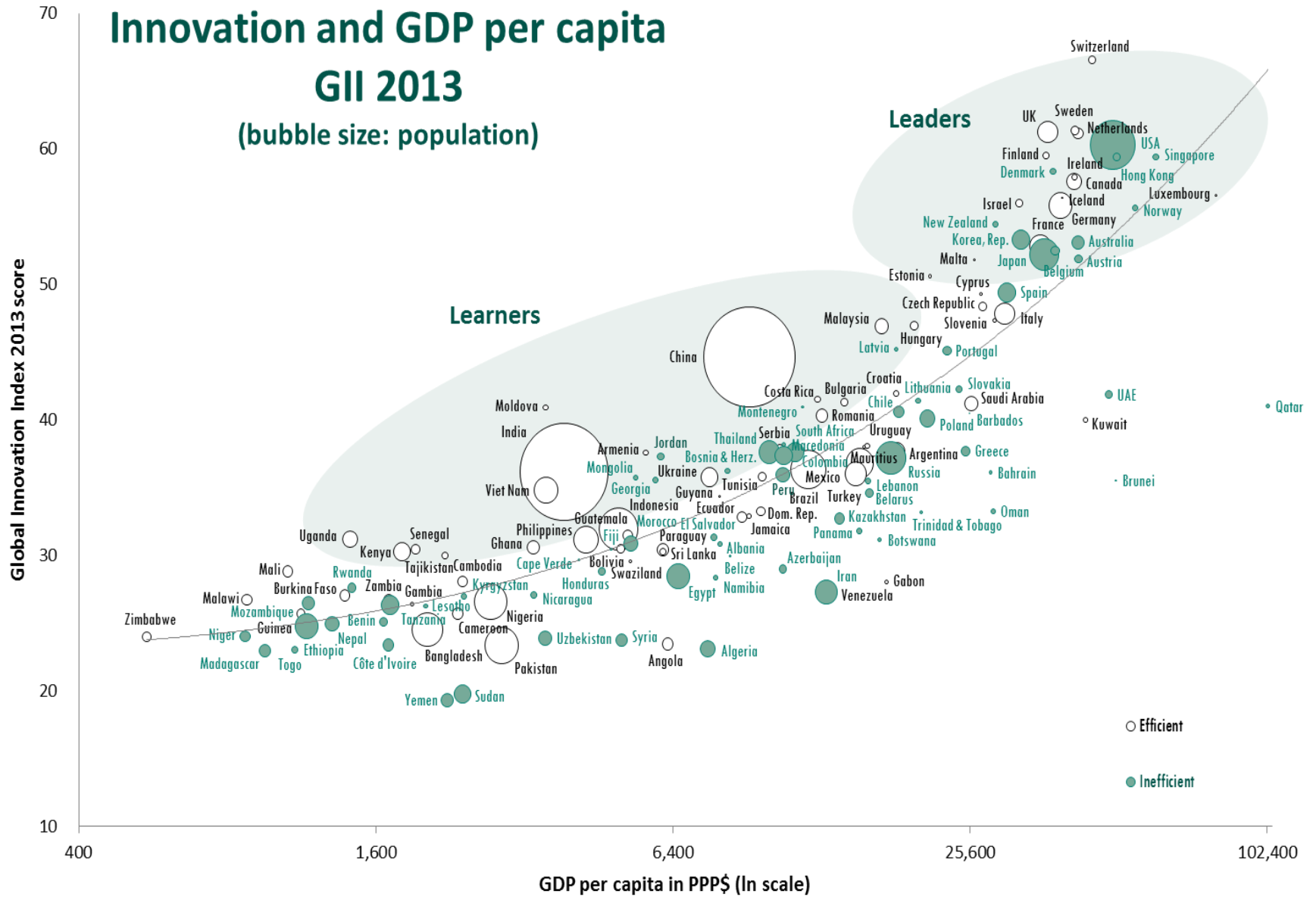


**Mapping the GII rankings is not the whole story**

# Innovation and GDP per capita

## GII 2013

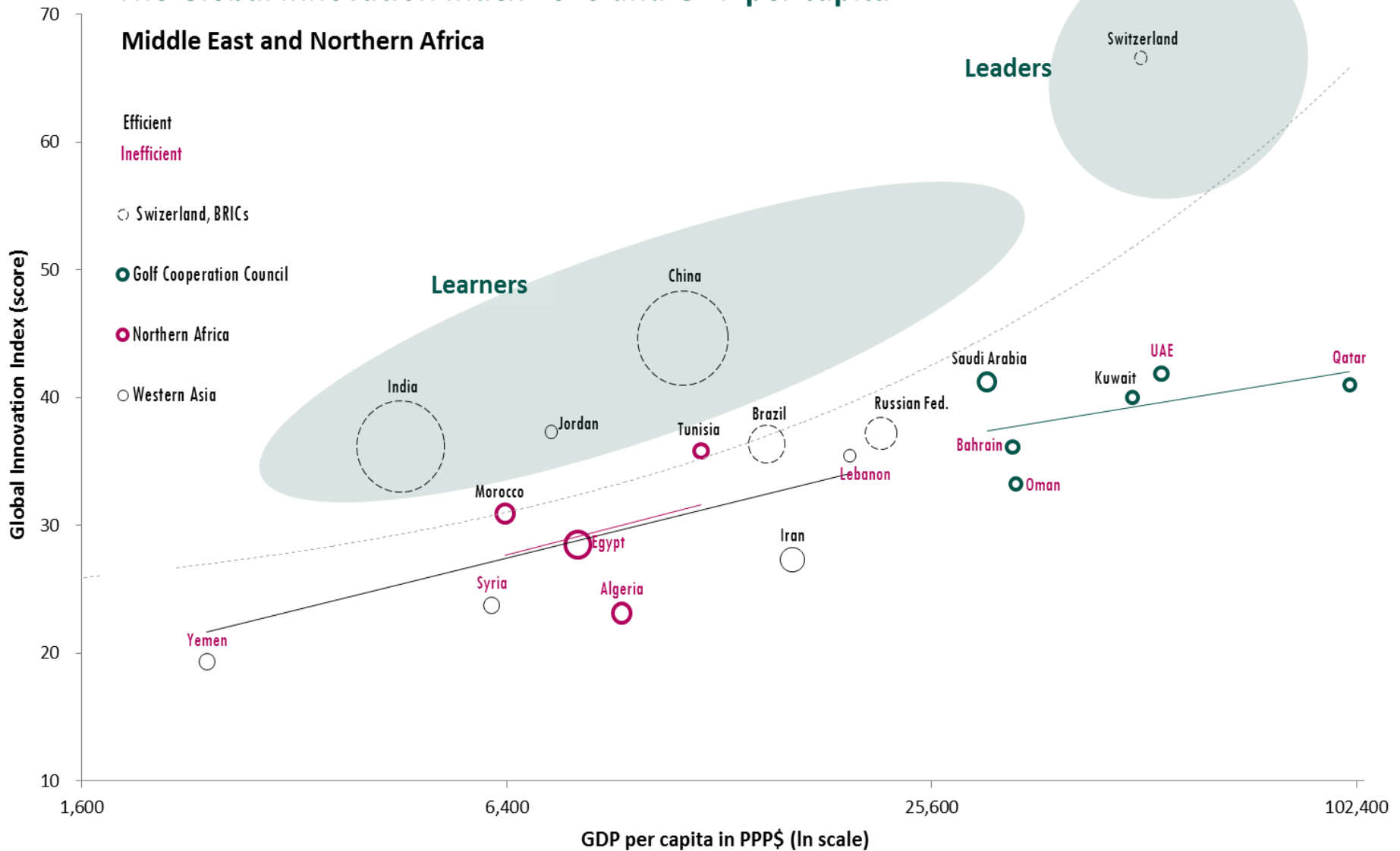
(bubble size: population)



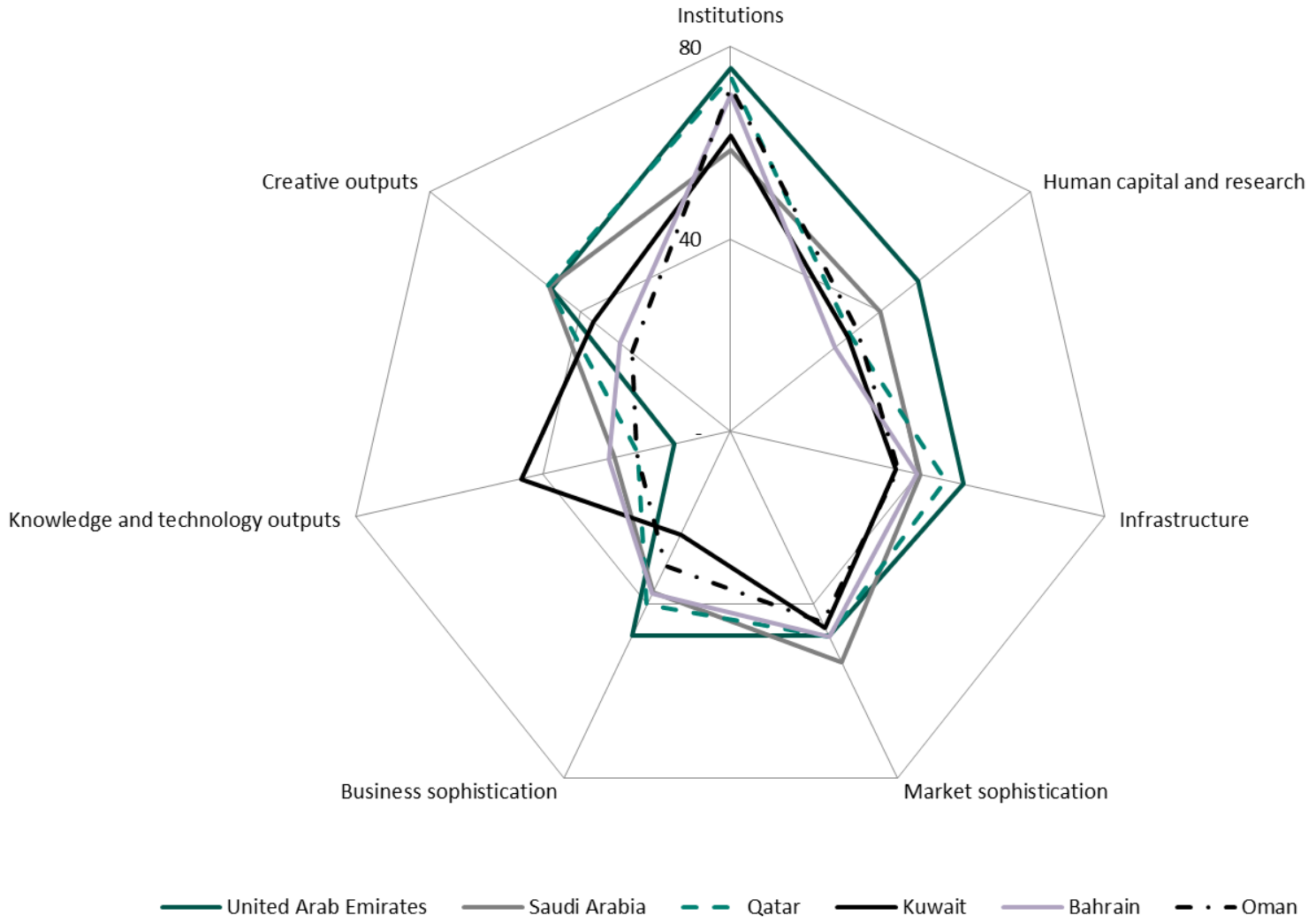


# The Global Innovation Index 2013 and GDP per capita

## Middle East and Northern Africa



# The Global Innovation Index 2013 Scores Gulf Cooperation Council



# Local dynamics of innovation are key

- The GII 2013 focuses on ‘the local dynamics of innovation’
- Original innovation ecosystems are thriving around the world
- Successful local dynamics

# A benchmark for policymakers

Measuring innovation is a moving target.

The GII helps identify targeted policies, good practices, and other levers to foster innovation.

Country profiles include strengths and weaknesses.

The GII rankings attract media attention, but they are not the main part of the GII.

Key indicators	
Population (millions)	8.1
GDP (US\$ billions)	627.9
GDP per capita, PPP\$	45,285.8
Income group	High income
Region	Europe

	Score (0-100) or value (part data)	Rank
<b>Global Innovation Index (out of 142)</b>	<b>66.6</b>	<b>1</b>
Innovation Output Sub-Index	66.7	1
Innovation Input Sub-Index	66.5	7
Innovation Efficiency Ratio	1.0	12
Global Innovation Index 2012 (based on GI 2012 framework)	68.2	1

<b>1</b>	<b>Institutions</b>	<b>87.3</b>	<b>16</b>
1.1	Political environment	92.7	6
1.1.1	Political stability*	97.8	6
1.1.2	Government effectiveness*	90.2	6
1.1.3	Press freedom*	90.1	12
1.2	Regulatory environment	94.6	12
1.2.1	Regulatory quality*	92.3	12
1.2.2	Rule of law*	94.7	11
1.2.3	Cost of redundancy/dismissal, salary weeks	10.1	39
1.3	Business environment	74.6	31
1.3.1	Ease of starting a business*	86.0	61
1.3.2	Ease of resolving insolvency*	50.8	41
1.3.3	Ease of paying taxes*	87.0	17

<b>2</b>	<b>Human capital &amp; research</b>	<b>55.4</b>	<b>14</b>
2.1	Education	57.5	56
2.1.1	Current expenditure on education, % GNI	4.8	47
2.1.2	Public expenditure/pupil, % GDP/cap	27.6	15
2.1.3	School life expectancy, years	15.7	26
2.1.4	PISA scales in reading, maths, & science	517.0	11
2.1.5	Pupil-teacher ratio, secondary	n/a	n/a
2.2	Tertiary education	44.1	32
2.2.1	Tertiary enrolment, % gross	54.8	45
2.2.2	Graduates in science & engineering, %	19.8	50
2.2.3	Tertiary inbound mobility, %	15.4	11
2.2.4	Gross tertiary outbound enrolment, %	2.5	39
2.3	Research & development (R&D)	64.8	9
2.3.1	Researchers, headcounts/mn pop	6,057.4	12
2.3.2	Gross expenditure on R&D, % GDP	2.9	7
2.3.3	QS university ranking, average score top 3*	82.8	6

<b>3</b>	<b>Infrastructure</b>	<b>57.0</b>	<b>8</b>
3.1	Information & communication technologies (ICTs)	67.2	20
3.1.1	ICT access*	88.9	2
3.1.2	ICT use*	78.4	2
3.1.3	Government's online service*	67.3	32
3.1.4	E-participation*	34.2	44
3.2	General Infrastructure	42.9	23
3.2.1	Electricity output, kWh/cap	8,049.7	23
3.2.2	Electricity consumption, kWh/cap	8,074.6	18
3.2.3	Logistics performance*	70.0	16
3.2.4	Gross capital formation, % GDP	21.9	75
3.3	Ecological sustainability	61.0	5
3.3.1	GDP/unit of energy use, 2000 PPP\$/kg oil eq.	11.7	6
3.3.2	Environmental performance*	76.7	1
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	6.8	15

<b>4</b>	<b>Market sophistication</b>	<b>77.5</b>	<b>6</b>
4.1	Credit	81.1	11
4.1.1	Ease of getting credit*	81.3	22
4.1.2	Domestic credit to private sector, % GDP	169.4	12
4.1.3	Microfinance gross loans, % GDP	n/a	n/a

Switzerland			
4.2	Investment	66.2	6
4.2.1	Ease of protecting investors*	31.9	133
4.2.2	Market capitalization, % GDP	141.4	3
4.2.3	Total value of stocks traded, % GDP	140.8	1
4.2.4	Venture capital deals/tr PPP\$ GDP	0.1	13
4.3	Trade & competition	85.1	11
4.3.1	Applied tariff rate, weighted mean, %	0.0	1
4.3.2	Non-agricultural mkt access weighted tariff, %	1.9	98
4.3.3	Intensity of local competition†	76.4	18

<b>5</b>	<b>Business sophistication</b>	<b>55.3</b>	<b>4</b>
5.1	Knowledge workers	78.7	2
5.1.1	Knowledge-intensive employment, %	42.8	8
5.1.2	Firms offering formal training, % firms	n/a	n/a
5.1.3	R&D performed by business, % GDP	2.1	6
5.1.4	R&D financed by business, %	68.2	5
5.1.5	GMAT mean score	574.4	20
5.1.6	GMAT test takers/mn pop. 20-34	385.6	11
5.2	Innovation linkages	51.5	8
5.2.1	University/industry research collaboration†	82.2	1
5.2.2	State of cluster development†	67.4	8
5.2.3	R&D financed by abroad, %	6.0	55
5.2.4	JV-strategic alliance deals/tr PPP\$ GDP	0.1	21
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	6.5	1
5.3	Knowledge absorption	35.8	34
5.3.1	Royalty & license fees payments, % service imports	37.6	1
5.3.2	High-tech imports less re-imports, %	15.1	18
5.3.3	Comm., computer & info. services imports, %	2.3	100
5.3.4	FDI net inflows, % GDP	0.1	134

<b>6</b>	<b>Knowledge &amp; technology outputs</b>	<b>61.5</b>	<b>1</b>
6.1	Knowledge creation	87.3	1
6.1.1	Domestic resident patent ap/bn PPP\$ GDP	22.6	5
6.1.2	PCI resident patent ap/bn PPP\$ GDP	11.6	3
6.1.3	Domestic res utility model ap/bn PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	65.4	3
6.1.5	Citable documents H index	537.0	9
6.2	Knowledge impact	54.2	10
6.2.1	Growth rate of PPP\$ GDP/worker, %	-0.1	99
6.2.2	New businesses/th pop. 15-64	2.5	41
6.2.3	Computer software spending, % GDP	0.7	4
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	28.8	16
6.2.5	High- & medium-high-tech manufactures, %	61.3	3
6.3	Knowledge diffusion	55.8	5
6.3.1	Royalty & license fees receipts, % service exports	19.6	3
6.3.2	High-tech exports less re-exports, %	22.0	7
6.3.3	Comm., computer & info. services exports, %	1.6	124
6.3.4	FDI net outflows, % GDP	6.5	8

<b>7</b>	<b>Creative outputs</b>	<b>71.8</b>	<b>2</b>
7.1	Intangible assets	72.2	4
7.1.1	Domestic res trademark reg/bn PPP\$ GDP	88.7	9
7.1.2	Madrid trademark registrations/bn PPP\$ GDP	7.7	1
7.1.3	ICT & business model creation†	72.5	17
7.1.4	ICT & organizational model creation†	66.6	18
7.2	Creative goods & services	69.5	2
7.2.1	Audio-visual & related services exports, %	n/a	n/a
7.2.2	National feature films/mn pop. 15-69	15.0	6
7.2.3	Paid-for dailies, circulation, % pop. 15-69	38.3	7
7.2.4	Printing & publishing manufactures, %	3.8	14
7.2.5	Creative goods exports, %	5.0	14
7.3	Online creativity	73.5	6
7.3.1	Generic top-level domains (TLDs)/th pop. 15-69	88.8	9
7.3.2	Country-code TLDs/th pop. 15-69	78.8	3
7.3.3	Wikipedia monthly edits/mn pop. 15-69	73,737	20
7.3.4	Video uploads on YouTube/pop. 15-69	83.5	22

NOTE: ● Indicates a strength; ○ a weakness; \* an index; † a survey question.

# Policy conclusions and implications

- The GII 2013 is cautiously optimistic
- Innovation is a mindset
- Metrics are useful
- The core factor of innovation is talent
- The GII can help identify and pursue feasible and ambitious objectives for all types of economies

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