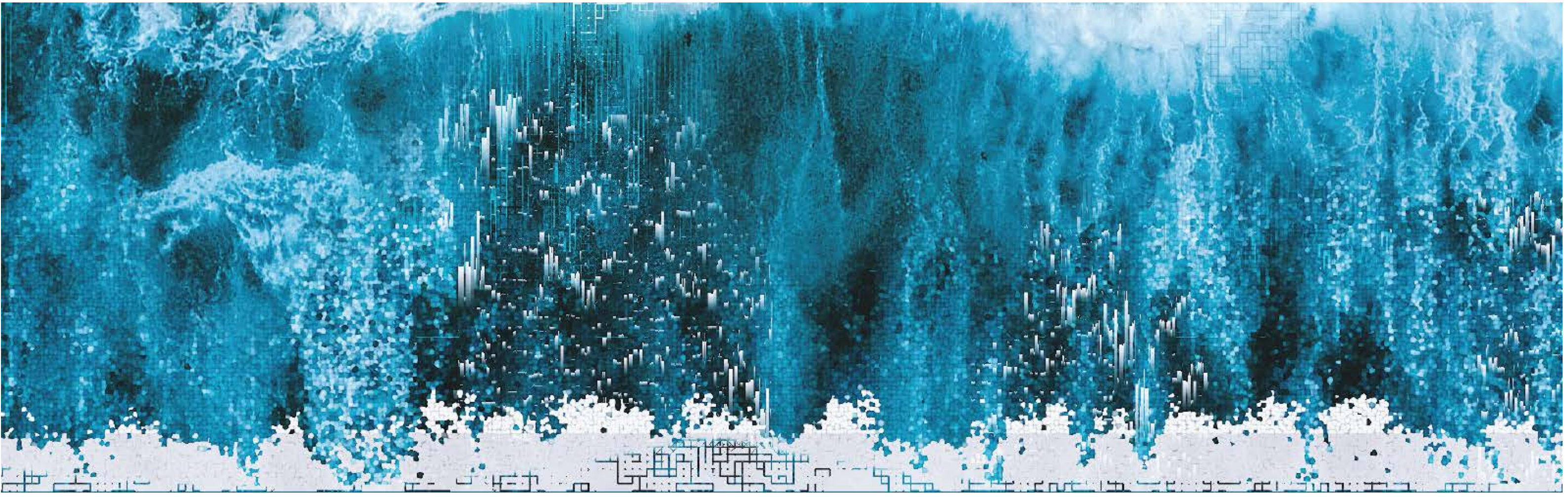


GLOBAL INNOVATION INDEX 2018

Sri Lanka

88th Sri Lanka is ranked 88th in the GII 2018, moving up 2 positions from the previous year.

The GII indicators are grouped into innovation inputs and outputs. The following table reflects Sri Lanka's ranking over time[1].

Sri Lanka's ranking over time

	GII	Input	Output	Efficiency
2018	88	95	80	78
2017	90	94	77	58
2016	91	98	78	54

- Sri Lanka performs better in innovation outputs than inputs.
- Its position in innovation inputs slightly deteriorates this year, ranking the 95th globally, down 1 spot from last year and 3 from 2016.
- Innovation outputs also move down, placing 80th globally, down 3 positions from 2017 and 2 from 2016.
- The Innovation Efficiency Ratio ranks 78th this year, dropping from the 58th and 54th positions it held over the last two years. Relative to its overall GII position (88th), the Efficiency Ratio (78th) is still strong (78th), showing that country is quite efficient in translating its innovation inputs into outputs. This rank is influenced by a higher ranking in innovation outputs (80th) compared to inputs (95th).

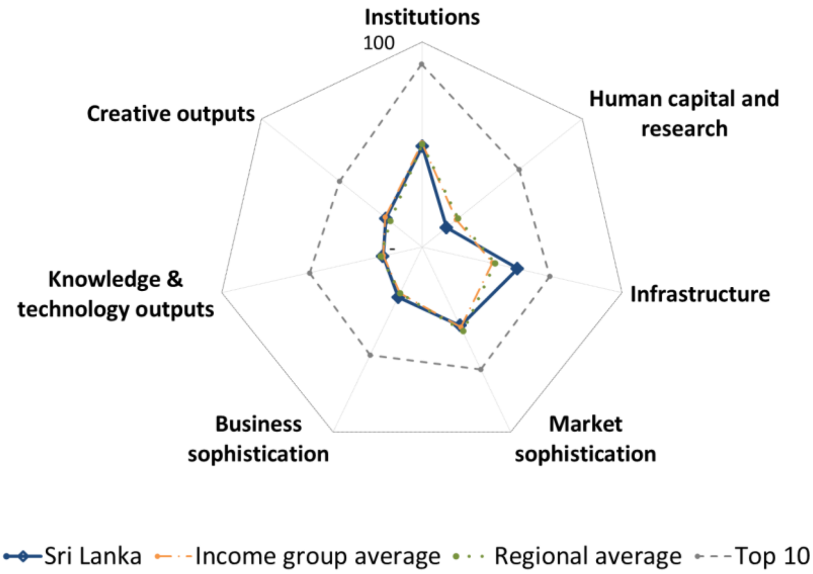
14th Sri Lanka is ranked 14th among the 30 lower-middle-income countries in the GII 2018.

4th Sri Lanka is 4th among the 9 countries in Central and Southern Asia.

[1] Note that year-on-year comparisons of the GII ranks are imperfect and influenced by changes in the GII model and data availability.

Benchmarking Sri Lanka to other lower-middle-income countries and the Central and Southern Asia region

Sri Lanka's scores by area



Lower-middle-income countries

Sri Lanka has high scores in 2 of the 7 GII areas – **Infrastructure** and **Business Sophistication**, in which it scores above the average of the lower-middle-income group.

Top scores in areas such as *Ecological sustainability* and *Knowledge absorption* are behind these high rankings.

Central and Southern Asia region

Compared to other countries in the Central and Southern Asia region, Sri Lanka performs above average in 3 of the 7 GII areas: Infrastructure, Business Sophistication, and Creative Outputs.

Sri Lanka's innovation profile

Strengths

- On the **innovation input** side, Sri Lanka presents GII strengths across three of the five GII input areas.
- In **Infrastructure** (58th), the top-ranked GII area for Sri Lanka, the country shows strong performance in the area *Ecological sustainability* (13th) as well as in the indicators *Gross capital formation* (17th) and *GDP per unit of energy use*, where it ranks 4th in the world.
- In **Market Sophistication** (92nd), Sri Lanka performs strongly in the area *Investment* (45th) and one of its indicators – *Ease of protecting minority investors* (42nd).
- Three indicators – *R&D financed by business* (37th), *Joint venture-strategic alliance deals* (25th), and *ICT services imports* (20th) – are highlighted as GII strengths for Sri Lanka in **Business Sophistication** (81st).
- On the **innovation output** side, three of the four strengths for Sri Lanka are found in **Knowledge & Technology Outputs** (81st) in the indicators *Productivity growth* (20th), *Computer software spending* (38th), *and ICT services exports* (20th).
- The indicator *Printing & other media* (23rd) presents strong performance in **Creative Outputs** (88th).

Weaknesses

- Several of the relative GII weaknesses for Sri Lanka are found in **Human Capital & Research** (111th), the lowest-ranked GII area for Sri Lanka, which itself is signaled as a weakness for the country. Here it shows relatively weak performance in one of its three components – *Tertiary education* (108th) – as well as in the indicators *Government funding per pupil* (81st), *Tertiary inbound mobility* (91st), *Gross expenditure on R&D* (105th), and *Global R&D companies expenditures* (40th).

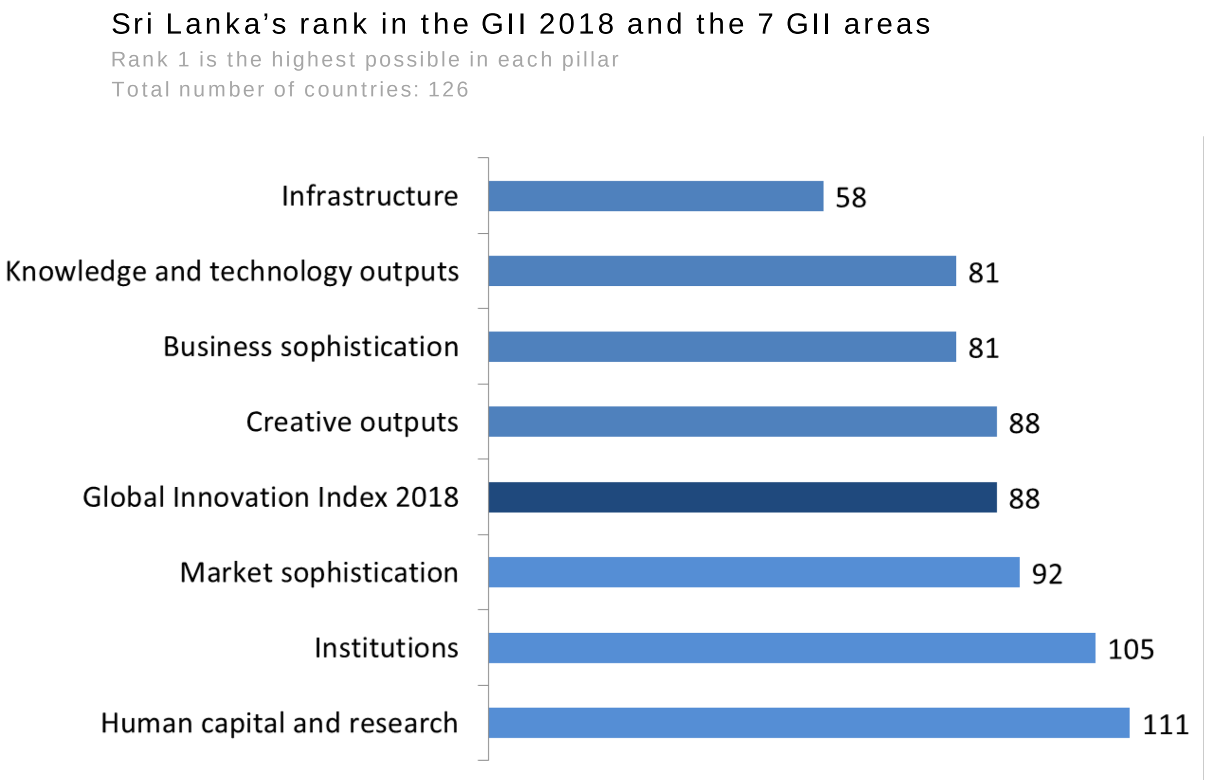
- In **Institutions** (105th), the area *Regulatory environment* (124th) and one of its three indicators, *Cost of redundancy dismissal* (122nd), are signaled as relative weaknesses for Sri Lanka.

- **Market Sophistication** (92nd) has one relatively weak component, *Credit* (116th).

- Finally, the indicator *Electricity output* (102nd) is a weakness in **Infrastructure** (58th), while the indicators *Firms offering formal training* (77th) and *Patent families in 2 or more offices* (102nd) are marked as weaknesses in **Business Sophistication** (81st).

- Among **innovation outputs**, the only two GII weaknesses are found in **Knowledge & Technology Outputs** (81st), where Sri Lanka performs relatively weakly in the indicators *Scientific & technical articles* (107th) and *High- & medium-high-tech manufactures* (85th).

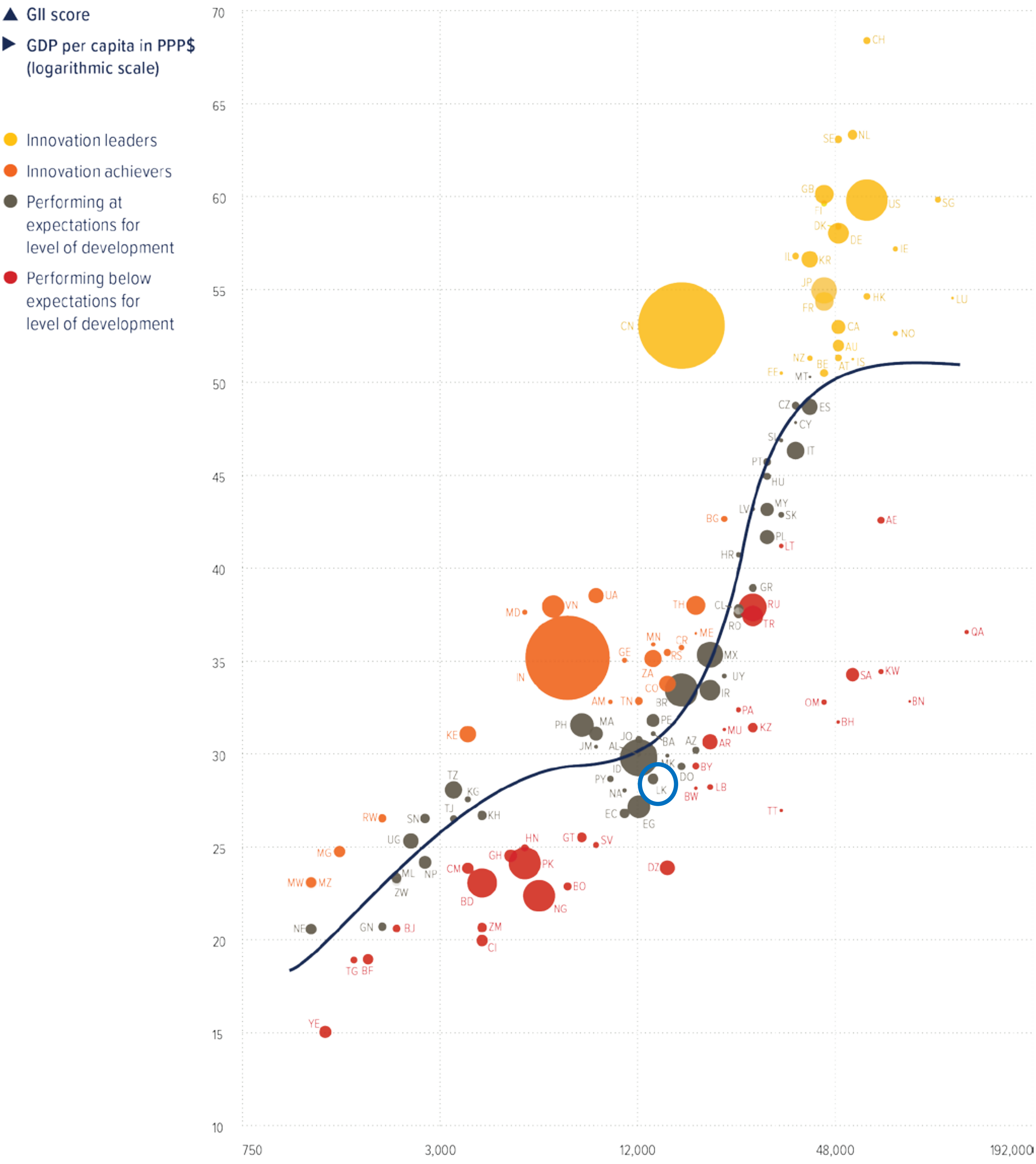
The following figure presents a summary of Sri Lanka's ranks in the 7 GII areas, as well as the overall rank in the GII 2018.



Expected vs. Observed Innovation Performance

The GII bubble chart shows the relationship between income levels (GDP per capita) and innovation performance (GII score). The depicted trendline gives an indication of the expected innovation performance at different levels of income. Countries located above the trendline are performing better that what would be expected based on their income level. Countries below the line are Innovation Under-performers relative to GDP.

Relative to GDP, Sri Lanka performs at its expected level of development.



Missing and Outdated Data

More and better data improves the ability of a country to understand its strengths and weaknesses and give policymakers greater capacity to plan and adapt public policies accordingly. The GII 2018 covers 126 countries that complied with the minimum indicator coverage of 35 indicators in the Innovation Input Sub-Index (66%) and 18 indicators in the Innovation Output Sub-Index (66%).

The following tables show data for Sri Lanka that is not available or that is outdated.

Missing Data

Code	Indicator	Country Year	Model Year	Source
2.1.4	PISA scales in reading, maths & science	n/a	2015	OECD PISA
2.2.2	Graduates in science & engineering, %	n/a	2016	UNESCO Institute for Statistics
4.2.3	Venture capital deals/bn PPP$ GDP	n/a	2017	Thomson Reuters, Thomson One Banker Private Equity, SDC Platinum
5.3.1	Intellectual property payments, % total trade	n/a	2016	WTO, Trade in Commercial Services
6.1.3	Utility models by origin/bn PPP$ GDP	n/a	2016	WIPO, Intellectual Property Statistics
6.3.1	Intellectual property receipts, % total trade	n/a	2016	WTO, Trade in Commercial Services
7.2.1	Cultural & creative services exports, % total trade	n/a	2016	WTO, Trade in Commercial Services
7.2.3	Entertainment & Media market/th pop. 15–69	n/a	2016	PwC's Global Entertainment and Media Outlook, 2017–2021

Outdated Data

Code	Indicator	Country Year	Model Year	Source
2.3.1	Researchers, FTE/mn pop.	2014	2016	UNESCO Institute for Statistics
2.3.2	Gross expenditure on R&D, % GDP	2014	2016	UNESCO Institute for Statistics
4.1.3	Microfinance gross loans, % GDP	2015	2016	Microfinance Information Exchange, Mix Market
4.3.1	Applied tariff rate, weighted mean, %	2015	2016	World Bank, World Development Indicators
5.1.1	Knowledge-intensive employment, %	2014	2016	ILO, ILOSTAT
5.1.2	Firms offering formal training, % firms	2011	2013	World Bank, Enterprise Surveys
5.1.3	GERD performed by business, % GDP	2014	2016	UNESCO Institute for Statistics
5.1.4	GERD financed by business, %	2014	2015	UNESCO Institute for Statistics
5.1.5	Females employed w/advanced degrees, %	2014	2016	ILO, ILOSTAT
5.2.3	GERD financed by abroad, %	2014	2015	UNESCO Institute for Statistics
5.3.5	Research talent, % in business enterprise	2014	2016	UNESCO Institute for Statistics
6.2.2	New businesses/th pop. 15–64	2012	2016	World Bank, Doing Business
6.2.5	High- & medium-high-tech manufactures, %	2014	2015	UNIDO, Industrial Statistics
7.2.2	National feature films/mn pop. 15–69	2013	2015	UNESCO Institute for Statistics
7.2.4	Printing & other media, % manufacturing	2014	2015	UNIDO, Industrial Statistics
7.3.3	Wikipedia edits/mn pop. 15–69	2014	2017	Wikimedia Foundation

SRI LANKA

GII 2018 rank
88

Output rank	Input rank	Income	Region	Efficiency ratio	Population (mn)	GDP, PPP$	GDP per capita, PPP$	GII 2017 rank
80	95	Lower-middle	CSA	78	20.9	278.2	12,811.0	90

		Score/Value	Rank	
1	**Institutions**	**49.3**	**105**	
1.1	Political environment	48.7	73	
1.1.1	Political stability & safety*	66.2	61	
1.1.2	Government effectiveness*	39.9	86	
1.2	Regulatory environment	32.8	124	○ ◇
1.2.1	Regulatory quality*	41.5	76	
1.2.2	Rule of law*	43.7	63	◆
1.2.3	Cost of redundancy dismissal, salary weeks	58.5	122	○ ◇
1.3	Business environment	66.4	73	
1.3.1	Ease of starting a business*	87.7	63	
1.3.2	Ease of resolving insolvency*	45.0	79	

		Score/Value	Rank	
2	**Human capital & research**	**15.0**	**111**	○
2.1	Education	34.5	99	
2.1.1	Expenditure on education, % GDP	3.5	93	
2.1.2	Government funding/pupil, secondary, % GDP/cap	11.3	81	○
2.1.3	School life expectancy, years	13.9	66	
2.1.4	PISA scales in reading, maths & science	n/a	n/a	
2.1.5	Pupil-teacher ratio, secondary	17.4	76	
2.2	Tertiary education	8.5	108	○
2.2.1	Tertiary enrolment, % gross	18.9	91	
2.2.2	Graduates in science & engineering, %	n/a	n/a	
2.2.3	Tertiary inbound mobility, %	0.4	91	○
2.3	Research & development (R&D)	2.1	92	
2.3.1	Researchers, FTE/mn pop.ⓓ	99.7	85	
2.3.2	Gross expenditure on R&D, % GDPⓓ	0.1	105	○
2.3.3	Global R&D companies, top 3, mn US$	0.0	40	○ ◇
2.3.4	QS university ranking, average score top 3*	5.2	72	

		Score/Value	Rank	
3	**Infrastructure**	**47.6**	**58**	◆
3.1	Information & communication technologies (ICTs)	49.3	85	
3.1.1	ICT access*	46.6	92	
3.1.2	ICT use*	19.1	103	
3.1.3	Government's online service*	65.2	53	
3.1.4	E-participation*	66.1	49	
3.2	General infrastructure	40.2	54	
3.2.1	Electricity output, kWh/cap	628.6	102	○
3.2.2	Logistics performance*ⓓ	29.2	83	
3.2.3	Gross capital formation, % GDP	31.8	17	● ◆
3.3	Ecological sustainability	53.3	13	● ◆
3.3.1	GDP/unit of energy use	20.0	4	● ◆
3.3.2	Environmental performance*	60.6	63	◆
3.3.3	ISO 14001 environmental certificates/bn PPP$ GDP	0.8	73	

		Score/Value	Rank	
4	**Market sophistication**	**42.4**	**92**	
4.1	Credit	19.6	116	○
4.1.1	Ease of getting credit*	40.0	101	
4.1.2	Domestic credit to private sector, % GDP	46.0	76	
4.1.3	Microfinance gross loans, % GDPⓓ	0.0	62	
4.2	Investment	46.1	45	●
4.2.1	Ease of protecting minority investors*	63.3	42	●
4.2.2	Market capitalization, % GDP	26.2	54	
4.2.3	Venture capital deals/bn PPP$ GDP	n/a	n/a	
4.3	Trade, competition, & market scale	61.5	61	
4.3.1	Applied tariff rate, weighted mean, %ⓓ	4.4	83	
4.3.2	Intensity of local competition†	63.9	82	
4.3.3	Domestic market scale, bn PPP$	278.2	57	

		Score/Value	Rank	
5	**Business sophistication**	**27.0**	**81**	
5.1	Knowledge workers	24.3	93	
5.1.1	Knowledge-intensive employment, %ⓓ	16.9	83	
5.1.2	Firms offering formal training, % firmsⓓ	18.4	77	○
5.1.3	GERD performed by business, % GDPⓓ	0.0	74	
5.1.4	GERD financed by business, %ⓓ	41.2	37	● ◆
5.1.5	Females employed w/advanced degrees, %ⓓ	8.8	69	
5.2	Innovation linkages	25.5	74	
5.2.1	University/industry research collaboration†	43.1	52	
5.2.2	State of cluster development†	48.8	51	
5.2.3	GERD financed by abroad, %ⓓ	2.1	74	
5.2.4	JV–strategic alliance deals/bn PPP$ GDP	0.1	25	● ◆
5.2.5	Patent families 2+ offices/bn PPP$ GDP	0.0	102	○
5.3	Knowledge absorption	31.3	58	◆
5.3.1	Intellectual property payments, % total trade	n/a	n/a	
5.3.2	High-tech net imports, % total trade	7.4	73	
5.3.3	ICT services imports, % total trade	2.2	20	● ◆
5.3.4	FDI net inflows, % GDP	1.0	105	
5.3.5	Research talent, % in business enterpriseⓓ	22.2	50	

		Score/Value	Rank	
6	**Knowledge & technology outputs**	**19.6**	**81**	
6.1	Knowledge creation	5.3	90	
6.1.1	Patents by origin/bn PPP$ GDP	1.1	61	
6.1.2	PCT patents by origin/bn PPP$ GDP	0.1	70	
6.1.3	Utility models by origin/bn PPP$ GDP	n/a	n/a	
6.1.4	Scientific & technical articles/bn PPP$ GDP	2.5	107	○
6.1.5	Citable documents H index	8.6	75	
6.2	Knowledge impact	32.5	81	
6.2.1	Growth rate of PPP$ GDP/worker, %	2.8	20	●
6.2.2	New businesses/th pop. 15–64ⓓ	0.5	87	
6.2.3	Computer software spending, % GDP	0.3	38	● ◆
6.2.4	ISO 9001 quality certificates/bn PPP$ GDP	3.0	79	
6.2.5	High- & medium-high-tech manufactures, %ⓓ	0.1	85	○
6.3	Knowledge diffusion	21.1	55	
6.3.1	Intellectual property receipts, % total trade	n/a	n/a	
6.3.2	High-tech net exports, % total trade	0.3	89	
6.3.3	ICT services exports, % total trade	4.2	20	●
6.3.4	FDI net outflows, % GDP	0.1	97	

		Score/Value	Rank	
7	**Creative outputs**	**22.5**	**88**	
7.1	Intangible assets	34.2	95	
7.1.1	Trademarks by origin/bn PPP$ GDP	26.4	80	
7.1.2	Industrial designs by origin/bn PPP$ GDP	0.9	69	
7.1.3	ICTs & business model creation†	57.9	73	
7.1.4	ICTs & organizational model creation†	47.7	88	
7.2	Creative goods & services	19.9	67	
7.2.1	Cultural & creative services exports, % total trade	n/a	n/a	
7.2.2	National feature films/mn pop. 15–69ⓓ	1.0	77	
7.2.3	Entertainment & Media market/th pop. 15–69	n/a	n/a	
7.2.4	Printing & other media, % manufacturingⓓ	1.7	23	●
7.2.5	Creative goods exports, % total trade	0.3	73	
7.3	Online creativity	1.9	90	
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	0.7	99	
7.3.2	Country-code TLDs/th pop. 15–69	0.2	105	
7.3.3	Wikipedia edits/mn pop. 15–69ⓓ	6.2	72	
7.3.4	Mobile app creation/bn PPP$ GDP	2.5	74	

NOTES: ● indicates a strength; ○ a weakness; ◆ an income group strength; ◇ an income group weakness; * an index; † a survey question.
ⓓ indicates that the country's data are older than the base year; see Appendix II for details, including the year of the data, at http://globalinnovationindex.org.
Square brackets indicate that the data minimum coverage (DMC) requirements were not met at the sub-pillar or pillar level; see page 75 of this appendix for details.