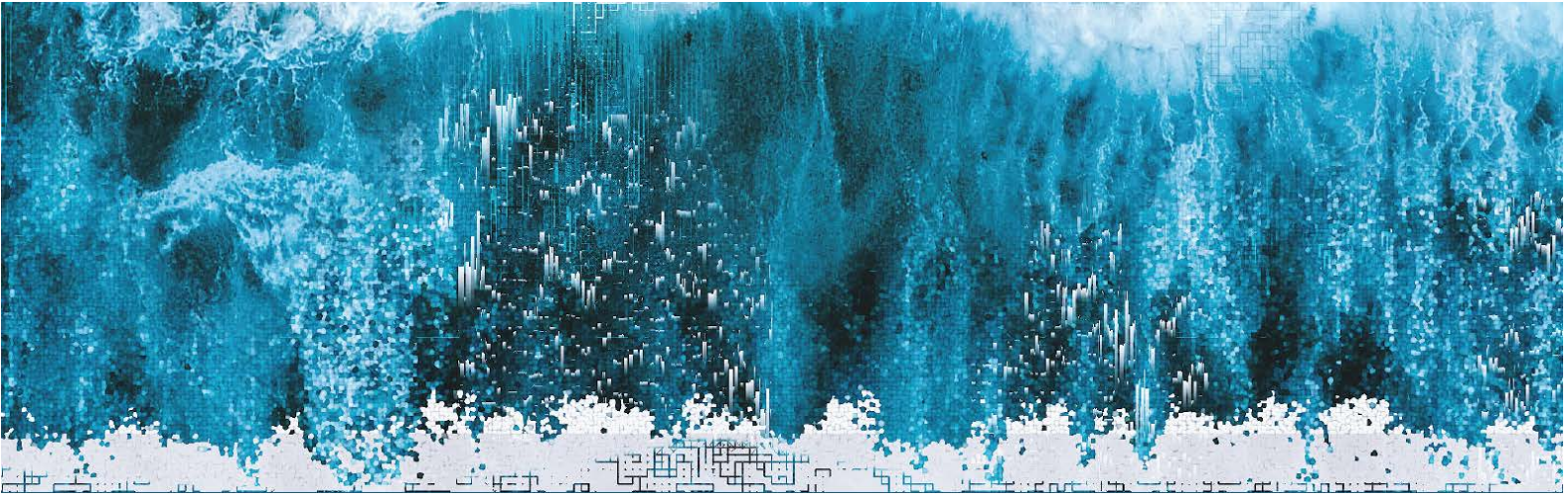


GLOBAL INNOVATION INDEX 2018

Mauritius

75th Mauritius is ranked 75th in the GII 2018, moving down 11 positions from last year.

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

Mauritius's ranking over time

	GII	Input	Output	Efficiency
2018	75	61	89	105
2017	64	47	82	109
2016	53	48	68	95

- Mauritius performs better in innovation inputs than outputs.
- It ranks 61st in inputs this year, moving down from the 47th and 48th spots in 2017 and 2016.
- Over the last three years, Mauritius' rank in innovation outputs has also deteriorated. This year it positions 89th, down from 82nd spot in 2017 and the 68th in 2016.
- Mauritius improves in the Innovation Efficiency Ratio, ranking 105th and moving up 4 spots from last year. Despite this improvement, relative to its overall GII position (75th), the Efficiency Ratio (105th) ranks rather low. This is partly influenced by a much higher ranking in innovation inputs (61st) compared to outputs (89th), which indicates a rather low efficiency in translating innovation inputs into outputs.

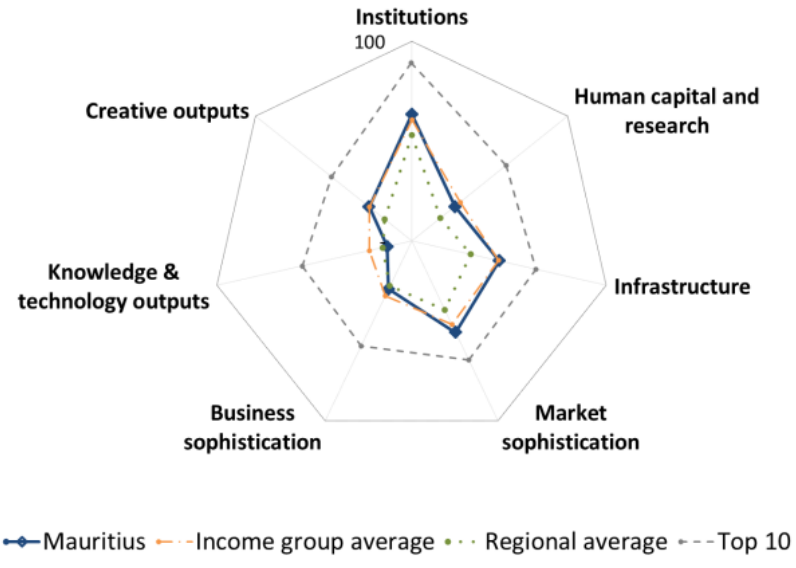
20th Mauritius is ranked 20th among the 34 upper-middle-income countries in the GII 2018.

2nd Mauritius is ranked 2nd among the 24 countries in Sub-Saharan Africa.

[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 Mauritius to other upper-middle-income countries and the Sub-Saharan Africa region

Mauritius's scores by area



Upper-middle-income countries

Mauritius has high scores in 3 of the 7 GII areas – **Institutions, Infrastructure,** and **Market Sophistication**, in which it scores above the average of the upper-middle-income group.

Top scores in areas such as *Business environment, Information & Communication Technologies (ICTs),* and *Trade, competition & market scale,* are behind these high rankings.

Sub-Saharan Africa region

Compared to other countries in the Sub-Saharan Africa region, Mauritius performs above-average in 6 of the 7 GII areas: Institutions, Human Capital & Research, Infrastructure, Market Sophistication, Business Sophistication, and Creative Outputs.

Innovation profile of Mauritius

Strengths

- Most of the GII strengths for Mauritius are exhibited in the area **Institutions** (59th), where the country shows strong performance in two of its three components – *Political environment* (28th) and *Business environment* (30th). At the indicator level, strengths are in *Political stability & safety* (12th), *Regulatory quality* (30th), and *Ease of resolving insolvency* (33rd).

- In **Market Sophistication** (45th) – the top-ranked GII area for Mauritius – comparative strengths are demonstrated in the area *Credit* (25th) and in the indicators *Domestic credit to private sector* (29th) and *Applied tariff rate* – in which Mauritius positions 8th in the world.

- Strengths on the innovation input side are also highlighted in **Human Capital & Research** (75th) – in the indicator *Government funding per pupil* (10th) – and in **Infrastructure** (65th) – in the indicator *GDP per unit of energy use* (11th). In addition, the indicator *State of cluster development* (32nd) is signaled as a strength in **Business Sophistication** (82nd).

- On the **innovation output** side, Mauritius performs strongly in two indicators: *New business density* (14th) in **Knowledge & Technology Outputs** (115th) and *National feature films* (16th) in **Creative Outputs** (68th).

Weaknesses

- The major GII weakness for Mauritius is the **Innovation Efficiency Ratio**, in which it ranks 105th.

- Most weaknesses are concentrated on the **innovation output** side, and in particular in **Knowledge & Technology Outputs** (115th), the lowest-ranked GII area, highlighted itself as a weakness for Mauritius. Two of its three components – *Knowledge creation* (105th) and *Knowledge impact* (111th) – are marked as relatively weak. Moreover, weak performance is found in the indicators *Patents by origin* (113th), *Quality of scientific publications* (114th), *High- & medium-high-tech manufactures* (93rd), and *High-tech exports* (120th).

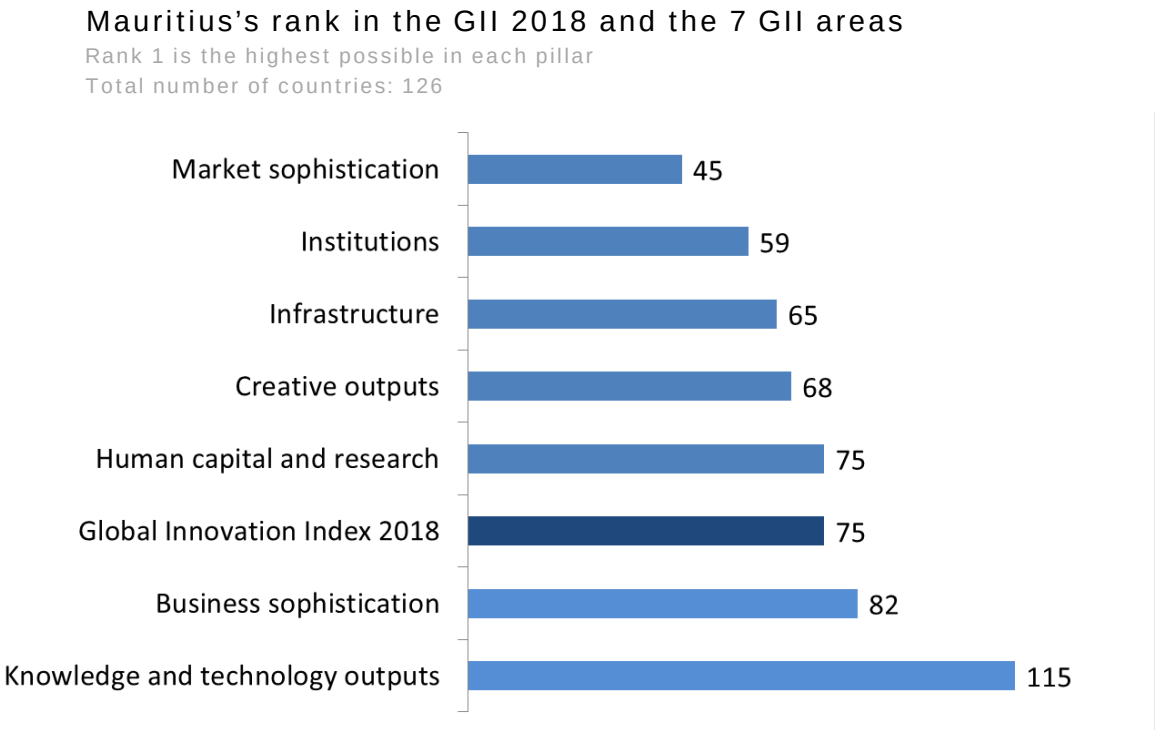
- On the **innovation input** side, relative weaknesses are distributed among all five GII areas.

- In **Institutions** (59th), the are *Regulatory environment* (123rd) and the indicator *Cost of redundancy dismissal* (124th) are signaled as relative weaknesses for Mauritius.

- In **Human Capital & Research** (75th), three indicators – *Gross expenditure on R&D* (92nd), *Global R&D companies expenditure* (40th), and *Quality of universities* (78th) – present relatively weak performance.

- Finally, the area *General infrastructure* (106th) is identified as a weak area in **Infrastructure** (65th). In **Market Sophistication** (45th), only one indicator – *Domestic market scale* (112th) – is a relative weakness for Mauritius. In **Business Sophistication** (82nd), *R&D financed by business* (92nd) is a relatively weak GII indicator.

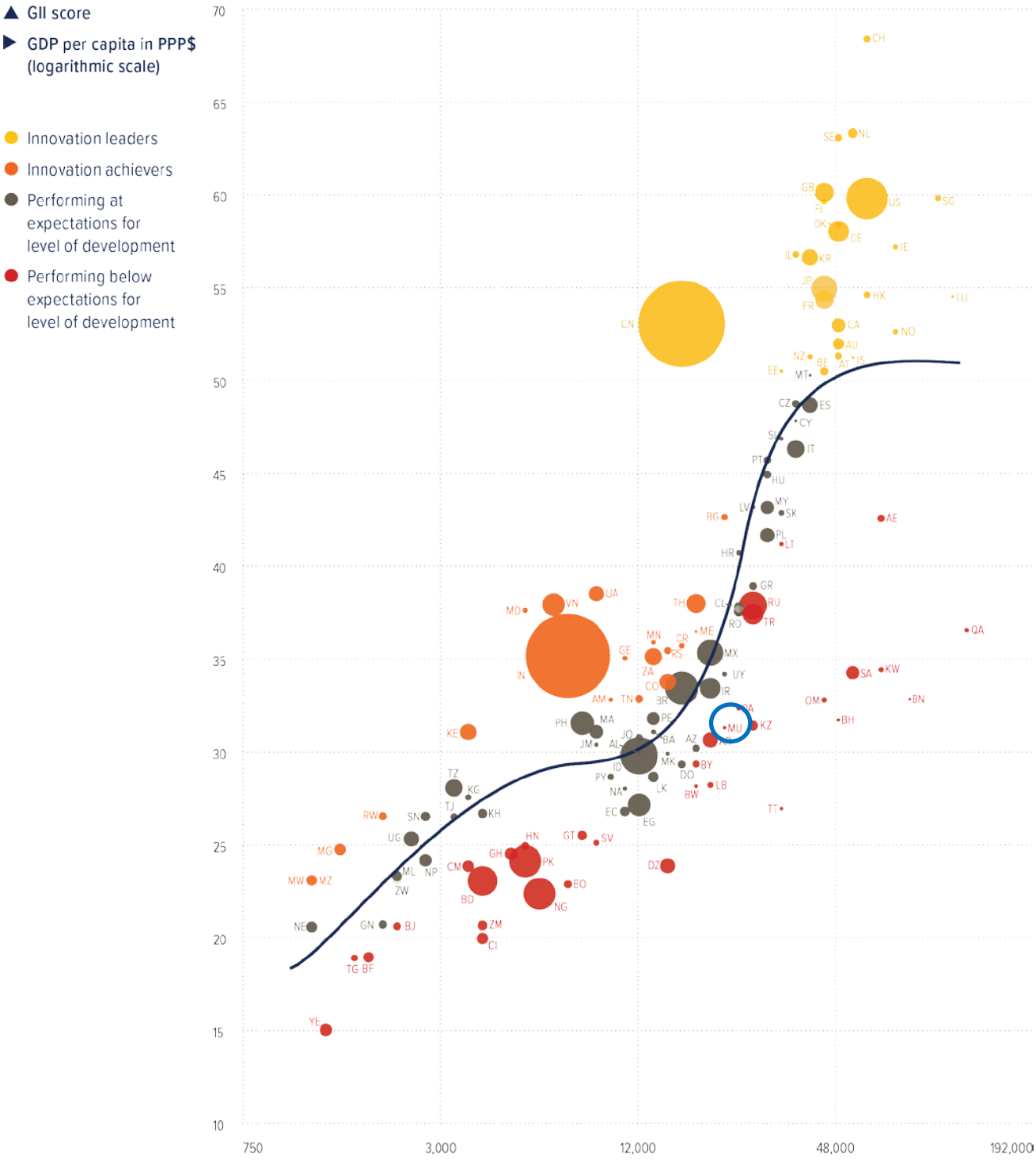
The following figure presents a summary of Mauritius ranks in the 7 GII areas, as well as the overall rank in the GII 2018.



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, Mauritius performs below 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 Mauritius 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 (UIS)
4.1.3	Microfinance gross loans, % GDP	n/a	2016	Microfinance Information Exchange, Mix Market
5.1.3	GERD performed by business, % GDP	n/a	2016	UNESCO Institute for Statistics (UIS)
5.3.5	Research talent, % in business enterprise	n/a	2016	UNESCO Institute for Statistics (UIS)
6.1.2	PCT patents by origin/bn PPP$ GDP	n/a	2017	WIPO, Intellectual Property Statistics
6.1.3	Utility models by origin/bn PPP$ GDP	n/a	2016	WIPO, Intellectual Property Statistics
6.2.1	Growth rate of PPP$ GDP/worker, %	n/a	2016	The Conference Board, Total Economy Database
7.2.3	Entertainment & Media market/th pop. 15–69	n/a	2016	PwC's Global Entertainment and Media Outlook, 2017–2021
7.3.4	Mobile app creation/bn PPP$ GDP	n/a	2017	App Annie Intelligence

Outdated Data

Code	Indicator	Country Year	Model Year	Source
2.1.3	School life expectancy, years	2015	2016	UNESCO Institute for Statistics (UIS)
2.3.1	Researchers, FTE/mn pop.	2012	2016	UNESCO Institute for Statistics (UIS)
2.3.2	Gross expenditure on R&D, % GDP	2012	2016	UNESCO Institute for Statistics (UIS)
5.1.2	Firms offering formal training, % firms	2009	2013	World Bank, Enterprise Surveys
5.1.4	GERD financed by business, %	2012	2015	UNESCO Institute for Statistics (UIS)
5.1.5	Females employed w/advanced degrees, %	2010	2016	ILO, ILOSTAT
5.2.3	GERD financed by abroad, %	2012	2015	UNESCO Institute for Statistics (UIS)
5.3.1	Intellectual property payments, % total trade	2015	2016	WTO, Trade in Commercial Services
5.3.3	ICT services imports, % total trade	2015	2016	WTO, Trade in Commercial Services
6.3.1	Intellectual property receipts, % total trade	2015	2016	WTO, Trade in Commercial Services
6.3.3	ICT services exports, % total trade	2015	2016	WTO, Trade in Commercial Services
7.1.2	Industrial designs by origin/bn PPP$ GDP	2013	2016	WIPO, Intellectual Property Statistics
7.3.3	Wikipedia edits/mn pop. 15–69	2014	2017	Wikimedia Foundation

MAURITIUS

GII 2018 rank **75**

Output rank	Input rank	Income	Region	Efficiency ratio	Population (mn)	GDP, PPP$	GDP per capita, PPP$	GII 2017 rank
89	61	Upper-middle	SSF	105 ○	1.3	27.4	21,640.3	64

		Score/Value	Rank	
	Institutions	**63.4**	**59**	
1.1	Political environment	75.6	28	● ◆
1.1.1	Political stability & safety*	88.9	12	● ◆
1.1.2	Government effectiveness*	69.0	35	◆
1.2	Regulatory environment	34.1	123	○ ◇
1.2.1	Regulatory quality*	70.5	30	● ◆
1.2.2	Rule of law*	65.9	35	◆
1.2.3	Cost of redundancy dismissal, salary weeks	73.6	124	○ ◇
1.3	Business environment	80.5	30	● ◆
1.3.1	Ease of starting a business*	92.0	36	
1.3.2	Ease of resolving insolvency*	69.1	33	● ◆
	Human capital & research	**27.6**	**75**	
2.1	Education	54.1	43	
2.1.1	Expenditure on education, % GDP	5.1	48	
2.1.2	Government funding/pupil, secondary, % GDP/cap	32.7	10	● ◆
2.1.3	School life expectancy, years[d]	15.1	49	
2.1.4	PISA scales in reading, maths & science	n/a	n/a	
2.1.5	Pupil-teacher ratio, secondary	12.6	50	
2.2	Tertiary education	27.1	77	
2.2.1	Tertiary enrolment, % gross	38.8	68	
2.2.2	Graduates in science & engineering, %	n/a	n/a	
2.2.3	Tertiary inbound mobility, %	4.5	45	
2.3	Research & development (R&D)	1.5	99	
2.3.1	Researchers, FTE/mn pop.[d]	181.8	78	
2.3.2	Gross expenditure on R&D, % GDP[d]	0.2	92	○
2.3.3	Global R&D companies, top 3, mn US$	0.0	40	○ ◇
2.3.4	QS university ranking, average score top 3*	0.0	78	○ ◇
	Infrastructure	**44.9**	**65**	
3.1	Information & communication technologies (ICTs)	62.8	57	
3.1.1	ICT access*	70.4	53	
3.1.2	ICT use*	44.4	71	
3.1.3	Government's online service*	70.3	45	
3.1.4	E-participation*	66.1	49	
3.2	General infrastructure	27.2	106	○
3.2.1	Electricity output, kWh/cap	2,378.6	73	
3.2.2	Logistics performance*[d]	20.9	100	
3.2.3	Gross capital formation, % GDP	20.5	82	
3.3	Ecological sustainability	44.7	43	
3.3.1	GDP/unit of energy use	15.6	11	● ◆
3.3.2	Environmental performance*	56.6	78	
3.3.3	ISO 14001 environmental certificates/bn PPP$ GDP	0.7	82	
	Market sophistication	**50.9**	**45**	
4.1	Credit	53.0	25	● ◆
4.1.1	Ease of getting credit*	65.0	49	
4.1.2	Domestic credit to private sector, % GDP	96.4	29	●
4.1.3	Microfinance gross loans, % GDP	n/a	n/a	
4.2	Investment	43.6	52	
4.2.1	Ease of protecting minority investors*	66.7	32	
4.2.2	Market capitalization, % GDP	64.2	27	
4.2.3	Venture capital deals/bn PPP$ GDP	0.0	34	
4.3	Trade, competition, & market scale	56.1	81	
4.3.1	Applied tariff rate, weighted mean, %	0.7	8	● ◆
4.3.2	Intensity of local competition†	72.4	43	
4.3.3	Domestic market scale, bn PPP$	27.4	112	○ ◇

		Score/Value	Rank	
	Business sophistication	**26.8**	**82**	
5.1	Knowledge workers	26.8	87	
5.1.1	Knowledge-intensive employment, %	24.9	60	
5.1.2	Firms offering formal training, % firms[d]	25.6	61	
5.1.3	GERD performed by business, % GDP	n/a	n/a	
5.1.4	GERD financed by business, %[d]	0.3	92	○ ◇
5.1.5	Females employed w/advanced degrees, %[d]	7.4	75	
5.2	Innovation linkages	27.2	70	
5.2.1	University/industry research collaboration†	36.6	88	
5.2.2	State of cluster development†	55.9	32	● ◆
5.2.3	GERD financed by abroad, %[d]	6.4	57	
5.2.4	JV–strategic alliance deals/bn PPP$ GDP	0.0	44	
5.2.5	Patent families 2+ offices/bn PPP$ GDP	0.2	44	
5.3	Knowledge absorption	26.4	81	
5.3.1	Intellectual property payments, % total trade[d]	0.3	77	
5.3.2	High-tech net imports, % total trade	7.5	70	
5.3.3	ICT services imports, % total trade[d]	1.4	50	
5.3.4	FDI net inflows, % GDP	2.6	64	
5.3.5	Research talent, % in business enterprise	n/a	n/a	
	Knowledge & technology outputs	**12.5**	**115**	○
6.1	Knowledge creation	3.7	105	○
6.1.1	Patents by origin/bn PPP$ GDP	0.1	113	○
6.1.2	PCT patents by origin/bn PPP$ GDP	n/a	n/a	
6.1.3	Utility models by origin/bn PPP$ GDP	n/a	n/a	
6.1.4	Scientific & technical articles/bn PPP$ GDP	3.5	93	
6.1.5	Citable documents H index	2.3	114	○
6.2	Knowledge impact	18.8	111	○
6.2.1	Growth rate of PPP$ GDP/worker, %	n/a	n/a	
6.2.2	New businesses/th pop. 15–64	9.8	14	● ◆
6.2.3	Computer software spending, % GDP	0.2	76	
6.2.4	ISO 9001 quality certificates/bn PPP$ GDP	9.1	37	
6.2.5	High- & medium-high-tech manufactures, %	0.0	93	○ ◇
6.3	Knowledge diffusion	15.0	93	
6.3.1	Intellectual property receipts, % total trade[d]	0.0	82	
6.3.2	High-tech net exports, % total trade	0.0	120	○
6.3.3	ICT services exports, % total trade[d]	2.5	45	
6.3.4	FDI net outflows, % GDP	0.4	72	
	Creative outputs	**27.3**	**68**	
7.1	Intangible assets	38.0	79	
7.1.1	Trademarks by origin/bn PPP$ GDP	42.8	61	
7.1.2	Industrial designs by origin/bn PPP$ GDP[d]	0.4	87	
7.1.3	ICTs & business model creation†	59.2	65	
7.1.4	ICTs & organizational model creation†	53.1	68	
7.2	Creative goods & services	27.0	50	
7.2.1	Cultural & creative services exports, % total trade	0.0	69	
7.2.2	National feature films/mn pop. 15–69	9.4	16	● ◆
7.2.3	Entertainment & Media market/th pop. 15–69	n/a	n/a	
7.2.4	Printing & other media, % manufacturing	1.4	31	
7.2.5	Creative goods exports, % total trade	1.2	42	
7.3	Online creativity	6.3	65	
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	12.7	34	
7.3.2	Country-code TLDs/th pop. 15–69	2.3	63	
7.3.3	Wikipedia edits/mn pop. 15–69[d]	5.9	75	
7.3.4	Mobile app creation/bn PPP$ GDP	n/a	n/a	

NOTES: ● indicates a strength; ○ a weakness; ◆ an income group strength; ◇ an income group weakness; * an index; † a survey question.
[d] 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.