PANAMA

GII 2019 rank

75

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP$	GDP per capita, PPP$	GII 2018 rank
72	**79**	**High**	**LCN**	**4.2**	**111.4**	**25,674.5**	**70**

		Score/Value	Rank	
INSTITUTIONS		**62.9**	**65**	◇
1.1	**Political environment**	**55.7**	**65**	◇
1.1.1	Political and operational stability*	73.7	50	◇
1.1.2	Government effectiveness*	46.7	70	◇
1.2	**Regulatory environment**	**67.2**	**65**	◇
1.2.1	Regulatory quality*	52.3	54	◇
1.2.2	Rule of law*	47.4	62	◇
1.2.3	Cost of redundancy dismissal, salary weeks	18.1	75	
1.3	**Business environment**	**65.8**	**78**	◇
1.3.1	Ease of starting a business*	92.1	43	
1.3.2	Ease of resolving insolvency*	39.6	99	◇
HUMAN CAPITAL & RESEARCH		**20.2**	**95**	◇
2.1	**Education**	**31.7**	**106**	◇
2.1.1	Expenditure on education, % GDP	3.2	98	◇
2.1.2	Government funding/pupil, secondary, % GDP/cap.	9.2	99	○ ◇
2.1.3	School life expectancy, years	12.7	84	◇
2.1.4	PISA scales in reading, maths, & science	n/a	n/a	
2.1.5	Pupil-teacher ratio, secondary	14.5	66	◇
2.2	**Tertiary education**	**27.6**	**73**	◇
2.2.1	Tertiary enrolment, % gross	47.3	63	◇
2.2.2	Graduates in science & engineering, %	17.2	77	
2.2.3	Tertiary inbound mobility, %	n/a	n/a	
2.3	**Research & development (R&D)**	**1.2**	**104**	◇
2.3.1	Researchers, FTE/mn pop.	39.1	95	◇
2.3.2	Gross expenditure on R&D, % GDP	0.1	111	○ ◇
2.3.3	Global R&D companies, avg. exp. top 3, mn US$	0.0	43	○ ◇
2.3.4	QS university ranking, average score top 3*	3.4	74	◇
INFRASTRUCTURE		**57.2**	**30**	●
3.1	**Information & communication technologies(ICTs)**	**61.7**	**76**	◇
3.1.1	ICT access*	63.5	71	◇
3.1.2	ICT use*	45.6	76	◇
3.1.3	Government's online service*	66.0	79	◇
3.1.4	E-participation*	71.9	64	◇
3.2	**General infrastructure**	**57.6**	**5**	● ◆
3.2.1	Electricity output, kWh/mn pop.	2,701.2	68	◇
3.2.2	Logistics performance*	56.7	37	●
3.2.3	Gross capital formation, % GDP	43.5	5	● ◆
3.3	**Ecological sustainability**	**52.3**	**20**	●
3.3.1	GDP/unit of energy use	18.9	7	● ◆
3.3.2	Environmental performance*	62.7	50	
3.3.3	ISO 14001 environmental certificates/bn PPP$ GDP	0.3	104	◇
MARKET SOPHISTICATION		**45.9**	**73**	
4.1	**Credit**	**42.3**	**49**	
4.1.1	Ease of getting credit*	80.0	20	● ◆
4.1.2	Domestic credit to private sector, % GDP	87.1	31	●
4.1.3	Microfinance gross loans, % GDP	0.3	38	
4.2	**Investment**	**37.3**	**88**	
4.2.1	Ease of protecting minority investors*	51.7	89	◇
4.2.2	Market capitalization, % GDP	24.0	54	
4.2.3	Venture capital deals/bn PPP$ GDP	n/a	n/a	
4.3	**Trade, competition, & market scale**	**58.0**	**75**	◇
4.3.1	Applied tariff rate, weighted avg., %	5.4	90	◇
4.3.2	Intensity of local competition†	70.7	53	
4.3.3	Domestic market scale, bn PPP$	111.4	74	

		Score/Value	Rank	
BUSINESS SOPHISTICATION		**19.1**	**123**	○ ◇
5.1	**Knowledge workers**	**21.7**	**104**	◇
5.1.1	Knowledge-intensive employment, %	24.7	57	◇
5.1.2	Firms offering formal training, % firms	11.0	87	○ ◇
5.1.3	GERD performed by business, % GDP	0.0	90	○ ◇
5.1.4	GERD financed by business, %	10.8	74	◇
5.1.5	Females employed w/advanced degrees, %	10.5	62	◇
5.2	**Innovation linkages**	**18.3**	**103**	◇
5.2.1	University/industry research collaboration†	35.5	91	◇
5.2.2	State of cluster development†	46.6	65	
5.2.3	GERD financed by abroad, %	0.3	97	○ ◇
5.2.4	JV-strategic alliance deals/bn PPP$ GDP	0.0	47	
5.2.5	Patent families 2+ offices/bn PPP$ GDP	0.1	66	
5.3	**Knowledge absorption**	**17.4**	**128**	○ ◇
5.3.1	Intellectual property payments, % total trade	0.2	89	◇
5.3.2	High-tech imports, % total trade	2.9	123	○ ◇
5.3.3	ICT services imports, % total trade	0.3	113	◇
5.3.4	FDI net inflows, % GDP	8.9	14	●
5.3.5	Research talent, % in business enterprise	0.9	78	◇
KNOWLEDGE & TECHNOLOGY OUTPUTS		**10.6**	**117**	◇
6.1	**Knowledge creation**	**8.5**	**76**	◇
6.1.1	Patents by origin/bn PPP$ GDP	0.3	85	
6.1.2	PCT patents by origin/bn PPP$ GDP	1.7	21	●
6.1.3	Utility models by origin/bn PPP$ GDP	0.0	64	○ ◇
6.1.4	Scientific & technical articles/bn PPP$ GDP	3.1	100	◇
6.1.5	Citable documents H-index	10.9	59	
6.2	**Knowledge impact**	**7.0**	**118**	◇
6.2.1	Growth rate of PPP$ GDP/worker, %	n/a	n/a	
6.2.2	New businesses/th pop. 15-64	0.8	75	
6.2.3	Computer software spending, % GDP	0.2	70	
6.2.4	ISO 9001 quality certificates/bn PPP$ GDP	1.9	88	◇
6.2.5	High- & medium-high-tech manufactures, %	0.0	93	◇
6.3	**Knowledge diffusion**	**16.3**	**72**	
6.3.1	Intellectual property receipts, % total trade	0.0	81	
6.3.2	High-tech net exports, % total trade	3.6	40	
6.3.3	ICT services exports, % total trade	1.1	79	
6.3.4	FDI net outflows, % GDP	1.3	46	
CREATIVE OUTPUTS		**33.3**	**43**	
7.1	**Intangible assets**	**40.3**	**67**	◇
7.1.1	Trademarks by origin/bn PPP$ GDP	41.4	63	
7.1.2	Industrial designs by origin/bn PPP$ GDP	0.0	118	○ ◇
7.1.3	ICTs & business model creation†	67.5	38	
7.1.4	ICTs & organizational model creation†	57.4	55	
7.2	**Creative goods & services**	**32.2**	**21**	●
7.2.1	Cultural & creative services exports, % total trade	0.5	48	
7.2.2	National feature films/mn pop. 15-69	0.4	98	○ ◇
7.2.3	Entertainment & Media market/th pop. 15-69	n/a	n/a	
7.2.4	Printing & other media, % manufacturing	3.0	7	● ◆
7.2.5	Creative goods exports, % total trade	2.5	23	●
7.3	**Online creativity**	**20.2**	**33**	●
7.3.1	Generic top-level domains (TLDs)/th pop. 15-69	66.4	9	● ◆
7.3.2	Country-code TLDs/th pop. 15-69	1.1	80	◇
7.3.3	Wikipedia edits/mn pop. 15-69	14.6	59	◇
7.3.4	Mobile app creation/bn PPP$ GDP	3.5	56	

NOTES: ● indicates a strength; ○ a weakness; ◆ an income group strength; ◇ an income group weakness; * an index; † a survey question. 🕘 indicates that the economy'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.