Global Innovation Index 2021

EL SALVADOR

96th El Salvador ranks 96th among the 132 economies featured in the GII 2021.

The Global Innovation Index (GII) ranks world economies according to their innovation capabilities. Consisting of roughly 80 indicators, grouped into innovation inputs and outputs, the GII aims to capture the multi-dimensional facets of innovation.

The following table shows the rankings of El Salvador over the past three years, noting that data availability and changes to the GII model framework influence year-on-year comparisons of the GII rankings. The statistical confidence interval for the ranking of El Salvador in the GII 2021 is between ranks 89 and 99.

Rankings for El Salvador (2019–2021)

	GII	Innovation inputs	Innovation outputs
2021	96	100	89
2020	92	95	87
2019	108	97	116

- El Salvador performs better in innovation outputs than innovation inputs in 2021.
- This year El Salvador ranks 100th in innovation inputs, lower than both 2020 and 2019.
- As for innovation outputs, El Salvador ranks 89th. This position is lower than last year but higher than 2019.

15th El Salvador ranks 15th among the 34 lower middle-income group economies.

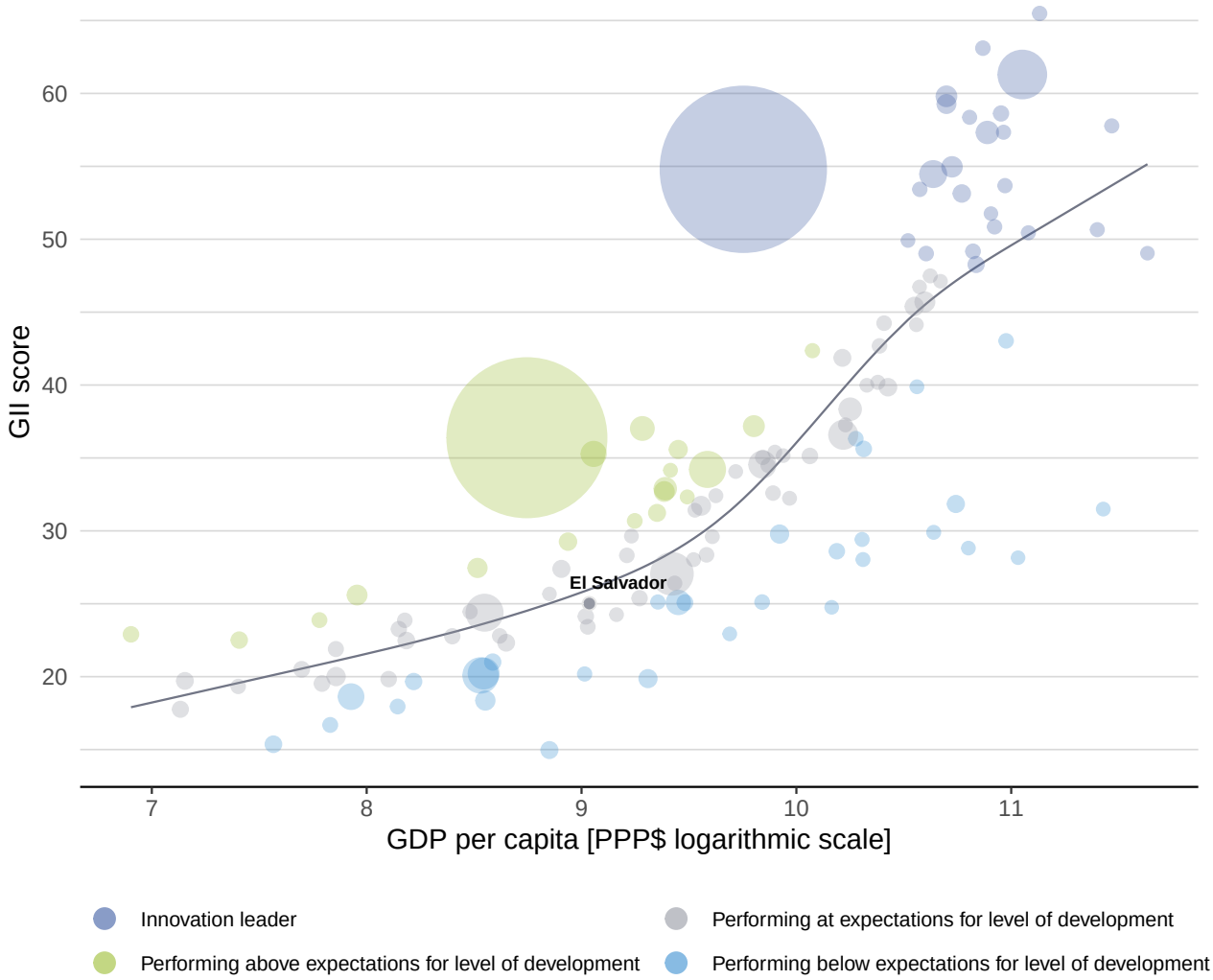
14th El Salvador ranks 14th among the 18 economies in Latin America and the Caribbean.

EXPECTED VS. OBSERVED INNOVATION PERFORMANCE

The bubble chart below shows the relationship between income levels (GDP per capita) and innovation performance (GII score). The trend line gives an indication of the expected innovation performance according to income level. Economies appearing above the trend line are performing better than expected and those below are performing below expectations.

Relative to GDP, El Salvador's performance is at expectations for its level of development.

The positive relationship between innovation and development

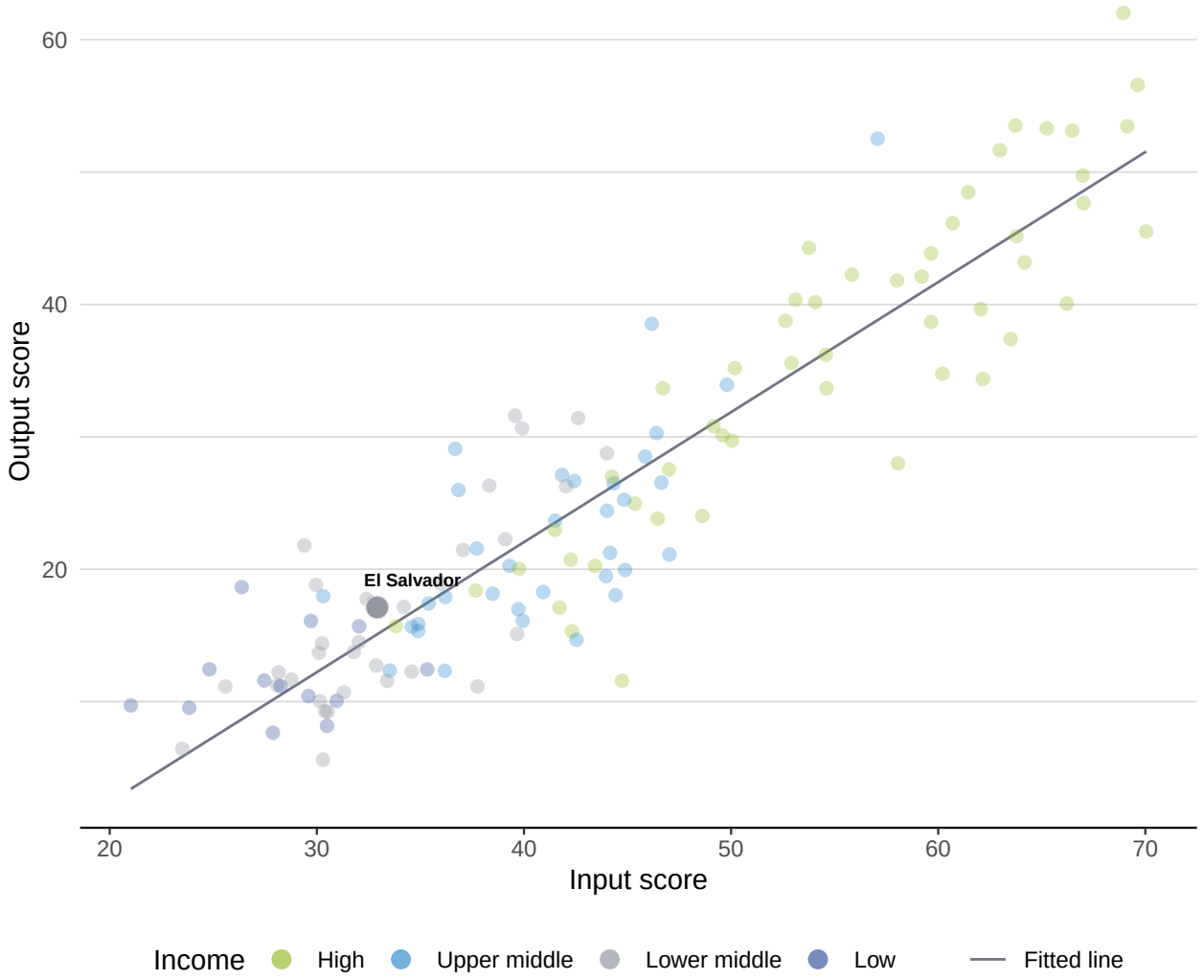


EFFECTIVELY TRANSLATING INNOVATION INVESTMENTS INTO INNOVATION OUTPUTS

The chart below shows the relationship between innovation inputs and innovation outputs. Economies above the line are effectively translating costly innovation investments into more and higher-quality outputs.

El Salvador produces more innovation outputs relative to its level of innovation investments.

Innovation input to output performance



BENCHMARKING AGAINST OTHER LOWER MIDDLE-INCOME GROUP ECONOMIES AND LATIN AMERICA AND THE CARIBBEAN

The seven GII pillar scores for El Salvador

Lower middle-income group economies

El Salvador performs above the lower middle-income group average in three pillars, namely: Institutions; Business sophistication; and, Creative outputs.

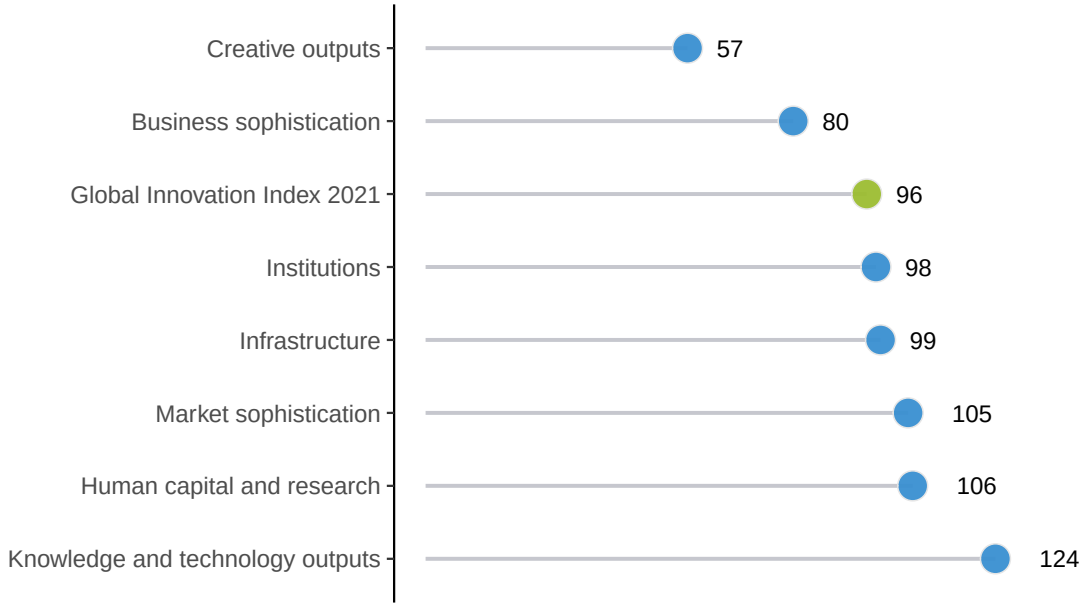
Latin America and the Caribbean

El Salvador performs above the regional average in Creative outputs.

OVERVIEW OF RANKINGS IN THE SEVEN GII 2021 AREAS

El Salvador performs best in Creative outputs and its weakest performance is in Knowledge and technology outputs.

The seven GII pillar ranks for El Salvador



Note: The highest possible ranking in each pillar is one.

INNOVATION STRENGTHS AND WEAKNESSES

The table below gives an overview of the strengths and weaknesses of El Salvador in the GII 2021.

Strengths and weaknesses for El Salvador

Strengths			Weaknesses		
Code	**Indicator name**	**Rank**	**Code**	**Indicator name**	**Rank**
3.3.1	GDP/unit of energy use	53	2.3.3	Global corporate R&D investors, top 3, mn US$	41
4.1.1	Ease of getting credit	23	2.3.4	QS university ranking, top 3	74
4.3.1	Applied tariff rate, weighted avg., %	56	3.2	General infrastructure	121
5.1.2	Firms offering formal training, %	13	5.2	Innovation linkages	126
5.3.1	Intellectual property payments, % total trade	35	5.2.1	University-industry R&D collaboration	121
5.3.2	High-tech imports, % total trade	47	5.2.2	State of cluster development and depth	116
6.3.1	Intellectual property receipts, % total trade	34	5.2.4	Joint venture/strategic alliance deals/bn PPP$ GDP	124
6.3.3	High-tech exports, % total trade	53	6.1	Knowledge creation	131
6.3.4	ICT services exports, % total trade	47	6.1.1	Patents by origin/bn PPP$ GDP	126
7.1	Intangible assets	31	6.1.4	Scientific and technical articles/bn PPP$ GDP	129
7.1.1	Trademarks by origin/bn PPP$ GDP	20	6.1.5	Citable documents H-index	125
			7.2.1	Cultural and creative services exports, % total trade	106
			7.3.4	Mobile app creation/bn PPP$ GDP	101

El Salvador

GII 2021 rank
96

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP$ (bn)	GDP per capita, PPP$	GII 2020 rank
89	100	Lower middle	LCN	6.5	54.5	8,401	92

		Score/ Value	Rank	
Institutions		**54.5**	**98**	
1.1	**Political environment**	**48.3**	**94**	
1.1.1	Political and operational stability*	64.3	80	
1.1.2	Government effectiveness*	40.3	97	
1.2	**Regulatory environment**	**53.0**	**99**	
1.2.1	Regulatory quality*	44.1	69	◆
1.2.2	Rule of law*	26.6	111	
1.2.3	Cost of redundancy dismissal	22.9	97	
1.3	**Business environment**	**62.1**	**96**	
1.3.1	Ease of starting a business*	78.6	112	
1.3.2	Ease of resolving insolvency*	45.6	83	
Human capital and research		**18.1**	**106**	
2.1	**Education**	**31.2**	**112**	
2.1.1	Expenditure on education, % GDP	3.6	80	
2.1.2	Government funding/pupil, secondary, % GDP/cap	14.2	79	
2.1.3	School life expectancy, years	11.6	94	
2.1.4	PISA scales in reading, maths and science	n/a	n/a	
2.1.5	Pupil-teacher ratio, secondary ◴	27.6	113	◇
2.2	**Tertiary education**	**22.0**	**92**	
2.2.1	Tertiary enrolment, % gross	29.4	86	
2.2.2	Graduates in science and engineering, %	21.4	64	
2.2.3	Tertiary inbound mobility, %	0.5	96	
2.3	**Research and development (R&D)**	**0.9**	**105**	
2.3.1	Researchers, FTE/mn pop. ◴	71.2	92	
2.3.2	Gross expenditure on R&D, % GDP ◴	0.2	94	
2.3.3	Global corporate R&D investors, top 3, mn US$	0.0	41	○ ◇
2.3.4	QS university ranking, top 3*	0.0	74	○ ◇
Infrastructure		**30.5**	**99**	
3.1	**Information and communication technologies (ICTs)**	**52.1**	**93**	
3.1.1	ICT access*	49.4	91	
3.1.2	ICT use*	33.7	103	
3.1.3	Government's online service*	57.6	93	
3.1.4	E-participation*	67.9	75	
3.2	**General infrastructure**	**14.0**	**121**	○
3.2.1	Electricity output, GWh/mn pop.	941.9	98	
3.2.2	Logistics performance*	24.6	97	
3.2.3	Gross capital formation, % GDP	14.7	115	◇
3.3	**Ecological sustainability**	**25.3**	**79**	
3.3.1	GDP/unit of energy use	11.7	53	●
3.3.2	Environmental performance*	43.1	82	◆
3.3.3	ISO 14001 environmental certificates/bn PPP$ GDP	0.3	93	
Market sophistication		**39.1**	**105**	
4.1	**Credit**	**42.0**	**61**	
4.1.1	Ease of getting credit*	80.0	23	●
4.1.2	Domestic credit to private sector, % GDP	54.0	61	
4.1.3	Microfinance gross loans, % GDP	0.4	38	
4.2	**Investment**	**19.9**	**[115]**	
4.2.1	Ease of protecting minority investors*	36.0	116	
4.2.2	Market capitalization, % GDP	n/a	n/a	
4.2.3	Venture capital investors, deals/bn PPP$ GDP	0.0	62	
4.2.4	Venture capital recipients, deals/bn PPP$ GDP	n/a	n/a	
4.3	**Trade, diversification, and market scale**	**55.6**	**107**	
4.3.1	Applied tariff rate, weighted avg., %	2.0	56	● ◆
4.3.2	Domestic industry diversification	n/a	n/a	
4.3.3	Domestic market scale, bn PPP$	54.5	101	

		Score/ Value	Rank	
Business sophistication		**22.4**	**80**	
5.1	**Knowledge workers**	**29.3**	**72**	
5.1.1	Knowledge-intensive employment, %	12.3	103	
5.1.2	Firms offering formal training, % ◴	53.8	13	● ◆
5.1.3	GERD performed by business, % GDP ◴	0.1	71	
5.1.4	GERD financed by business, %	35.2	54	
5.1.5	Females employed w/advanced degrees, %	4.3	97	
5.2	**Innovation linkages**	**11.0**	**126**	○ ◇
5.2.1	University-industry R&D collaboration†	26.2	121	○ ◇
5.2.2	State of cluster development and depth†	33.9	116	○ ◇
5.2.3	GERD financed by abroad, % GDP	0.0	80	
5.2.4	Joint venture/strategic alliance deals/bn PPP$ GDP	0.0	124	○
5.2.5	Patent families/bn PPP$ GDP	0.0	88	
5.3	**Knowledge absorption**	**26.9**	**66**	
5.3.1	Intellectual property payments, % total trade	1.1	35	● ◆
5.3.2	High-tech imports, % total trade	8.9	47	●
5.3.3	ICT services imports, % total trade	0.5	102	
5.3.4	FDI net inflows, % GDP	2.1	76	
5.3.5	Research talent, % in businesses	n/a	n/a	
Knowledge and technology outputs		**8.3**	**124**	○
6.1	**Knowledge creation**	**1.3**	**131**	○ ◇
6.1.1	Patents by origin/bn PPP$ GDP	0.0	126	○
6.1.2	PCT patents by origin/bn PPP$ GDP	0.0	91	
6.1.3	Utility models by origin/bn PPP$ GDP	0.1	58	
6.1.4	Scientific and technical articles/bn PPP$ GDP	1.1	129	○ ◇
6.1.5	Citable documents H-index	2.6	125	○
6.2	**Knowledge impact**	**4.6**	**[128]**	
6.2.1	Labor productivity growth, %	n/a	n/a	
6.2.2	New businesses/th pop. 15–64	0.6	93	
6.2.3	Software spending, % GDP	0.0	100	
6.2.4	ISO 9001 quality certificates/bn PPP$ GDP	2.7	80	
6.2.5	High-tech manufacturing, %	n/a	n/a	
6.3	**Knowledge diffusion**	**18.9**	**57**	
6.3.1	Intellectual property receipts, % total trade	0.3	34	● ◆
6.3.2	Production and export complexity	47.0	53	◆
6.3.3	High-tech exports, % total trade	2.2	53	●
6.3.4	ICT services exports, % total trade	2.4	47	●
Creative outputs		**26.0**	**57**	◆
7.1	**Intangible assets**	**44.6**	**31**	● ◆
7.1.1	Trademarks by origin/bn PPP$ GDP	82.3	20	● ◆
7.1.2	Global brand value, top 5,000, % GDP	n/a	n/a	
7.1.3	Industrial designs by origin/bn PPP$ GDP	0.1	107	
7.1.4	ICTs and organizational model creation†	42.7	103	
7.2	**Creative goods and services**	**4.9**	**[106]**	
7.2.1	Cultural and creative services exports, % total trade	0.0	106	○
7.2.2	National feature films/mn pop. 15–69	n/a	n/a	
7.2.3	Entertainment and media market/th pop. 15–69	n/a	n/a	
7.2.4	Printing and other media, % manufacturing	n/a	n/a	
7.2.5	Creative goods exports, % total trade	0.6	58	
7.3	**Online creativity**	**9.9**	**93**	
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	2.5	72	◆
7.3.2	Country-code TLDs/th pop. 15–69	0.6	96	
7.3.3	Wikipedia edits/mn pop. 15–69	38.2	87	
7.3.4	Mobile app creation/bn PPP$ GDP ◴	0.0	101	○

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 IV 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.

DATA AVAILABILITY

The following tables list data that are either missing or outdated for El Salvador.

Missing data for El Salvador

Code	Indicator name	Economy year	Model year	Source
2.1.4	PISA scales in reading, maths and science	n/a	2018	OECD Programme for International Student Assessment (PISA)
4.2.2	Market capitalization, % GDP	n/a	2019	World Federation of Exchanges
4.2.4	Venture capital recipients, deals/bn PPP$ GDP	n/a	2020	Refinitiv Eikon
4.3.2	Domestic industry diversification	n/a	2018	United Nations Industrial Development Organization
5.3.5	Research talent, % in businesses	n/a	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
6.2.1	Labor productivity growth, %	n/a	2020	The Conference Board
6.2.5	High-tech manufacturing, %	n/a	2018	United Nations Industrial Development Organization
7.1.2	Global brand value, top 5,000, % GDP	n/a	2020	Brand Finance
7.2.2	National feature films/mn pop. 15–69	n/a	2017	UNESCO Institute for Statistics
7.2.3	Entertainment and media market/th pop. 15–69	n/a	2020	PwC
7.2.4	Printing and other media, % manufacturing	n/a	2018	United Nations Industrial Development Organization

Outdated data for El Salvador

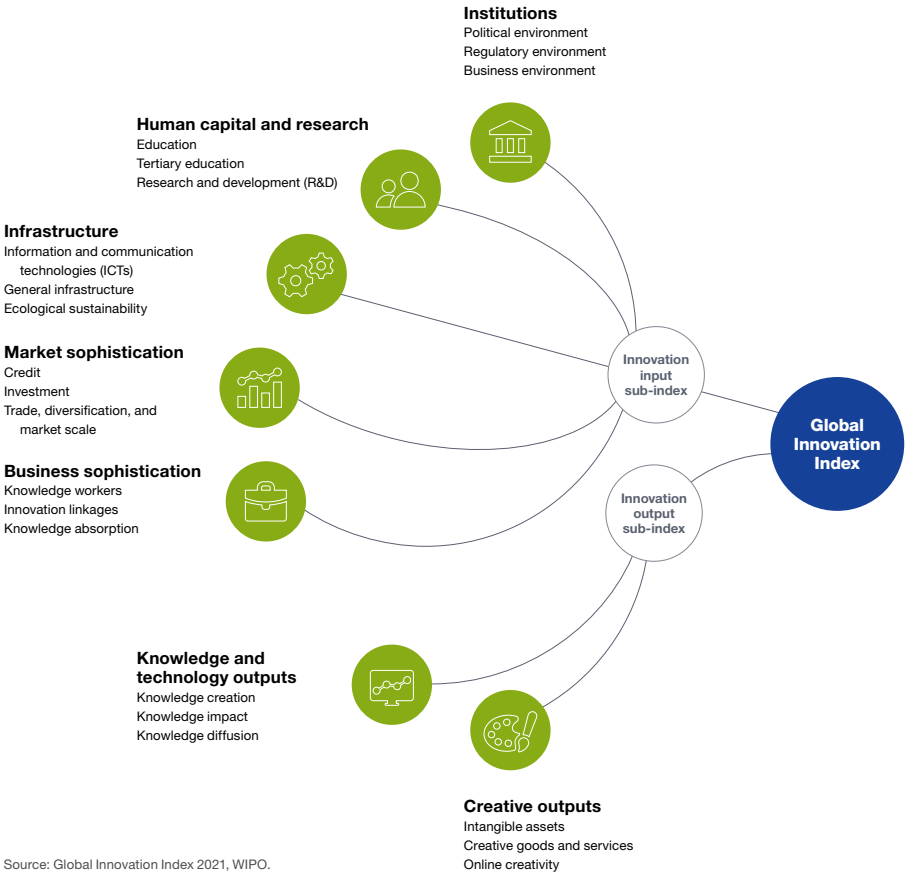
Code	Indicator name	Economy year	Model year	Source
2.1.5	Pupil-teacher ratio, secondary	2018	2019	UNESCO Institute for Statistics
2.3.1	Researchers, FTE/mn pop.	2018	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators

Code	Indicator name	Economy year	Model year	Source
2.3.2	Gross expenditure on R&D, % GDP	2018	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
5.1.2	Firms offering formal training, %	2016	2019	World Bank
5.1.3	GERD performed by business, % GDP	2018	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
7.3.4	Mobile app creation/bn PPP$ GDP	2018	2020	App Annie

ABOUT THE GLOBAL INNOVATION INDEX

The Global Innovation Index (GII) is published by the World Intellectual Property Organization (WIPO), a specialized agency of the United Nations.

Recognizing that innovation is a key driver of economic development, the GII aims to provide an innovation ranking and rich analysis referencing around 130 economies. Over the last decade, the GII has established itself as both a leading reference on innovation and a "tool for action" for economies that incorporate the GII into their innovation agendas.



Source: Global Innovation Index 2021, WIPO.

The Index is a ranking of the innovation capabilities and results of world economies. It measures innovation based on criteria that include institutions, human capital and research, infrastructure, credit, investment, linkages; the creation, absorption and diffusion of knowledge; and creative outputs.

The GII has two sub-indices: the Innovation Input Sub-Index and the Innovation Output Sub-Index, and seven pillars, each consisting of three sub-pillars.