DOMINICAN REPUBLIC

93rd
Dominican Republic ranks 93rd 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 Dominican Republic 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 Dominican Republic in the GII 2021 is between ranks 92 and 100.

Rankings for Dominican Republic (2019–2021)

	GII	Innovation inputs	Innovation outputs
2021	93	93	98
2020	90	94	85
2019	87	90	88

- Dominican Republic performs better in innovation inputs than innovation outputs in 2021.
- This year Dominican Republic ranks 93rd in innovation inputs, higher than last year but lower than 2019.
- As for innovation outputs, Dominican Republic ranks 98th. This position is lower than both 2020 and 2019.

31st
Dominican Republic ranks 31st among the 34 upper middle-income group economies.

13th
Dominican Republic ranks 13th 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, Dominican Republic's performance is below expectations for its level of development.

The positive relationship between innovation and development

- **Innovation leader**
- **Performing above expectations for level of development**
- **Performing at expectations for level of development**
- **Performing below expectations for level of development**
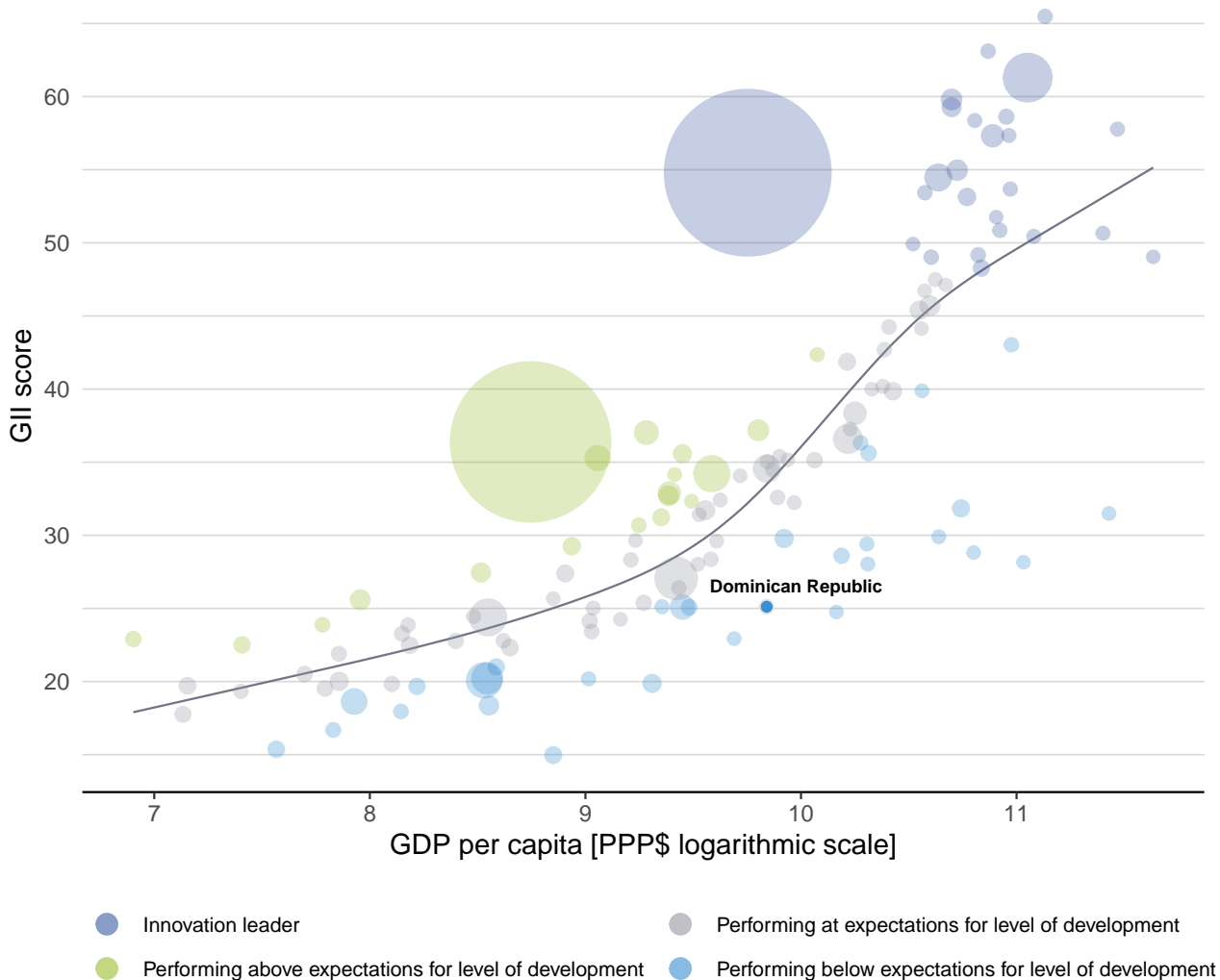
EFFECTIVELY TRANSLATING INNOVATION INVESTMENTS INTO INNOVATION OUTPUTS

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.

Dominican Republic produces less innovation outputs relative to its level of innovation investments.

Innovation input to output performance
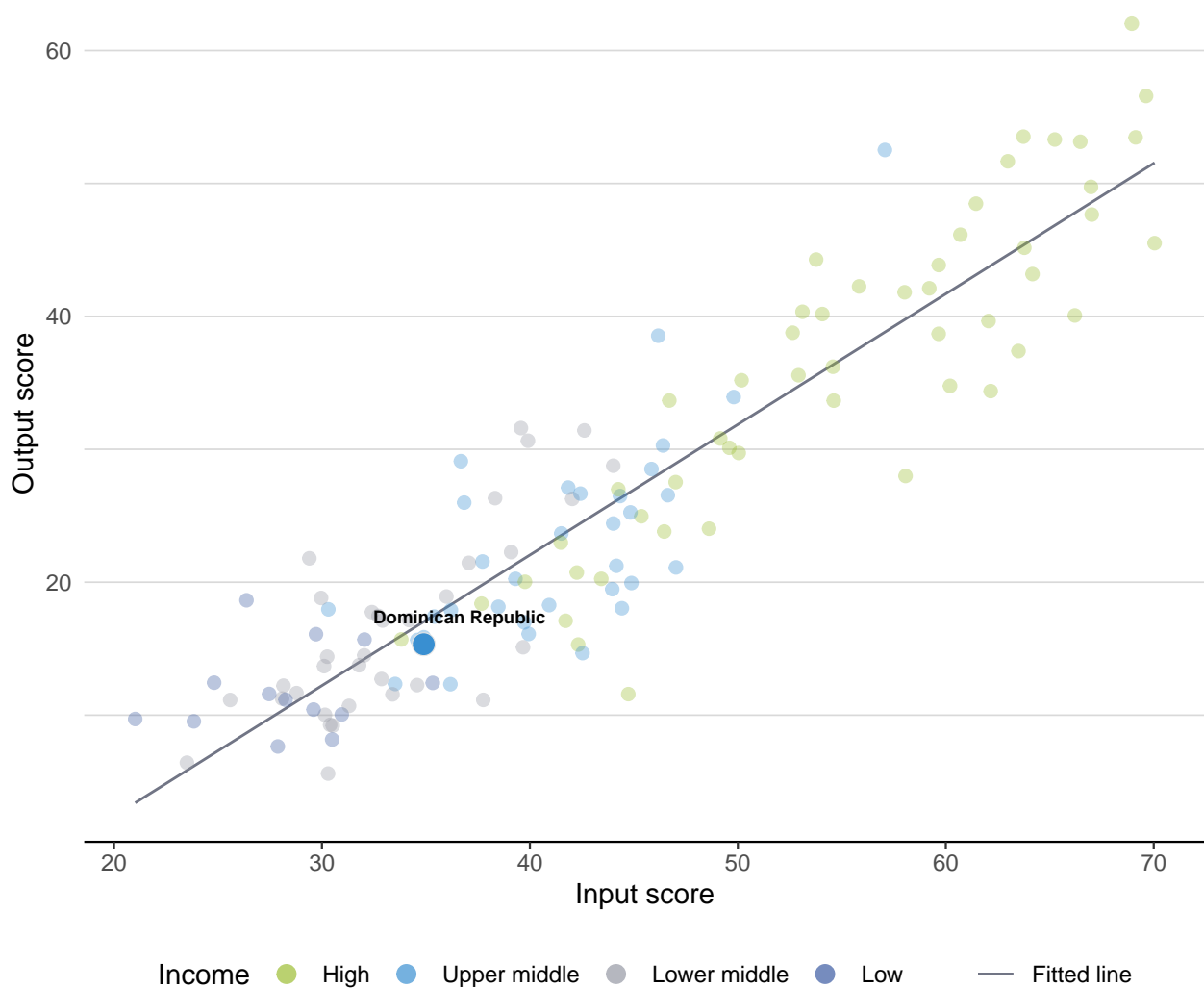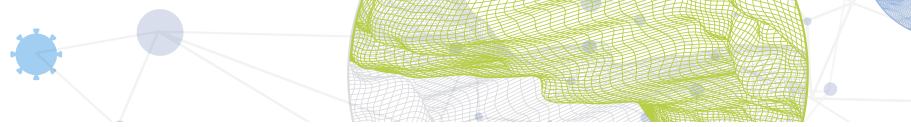
BENCHMARKING AGAINST OTHER UPPER MIDDLE-INCOME GROUP ECONOMIES AND LATIN AMERICA AND THE CARIBBEAN

The seven GII pillar scores for Dominican Republic
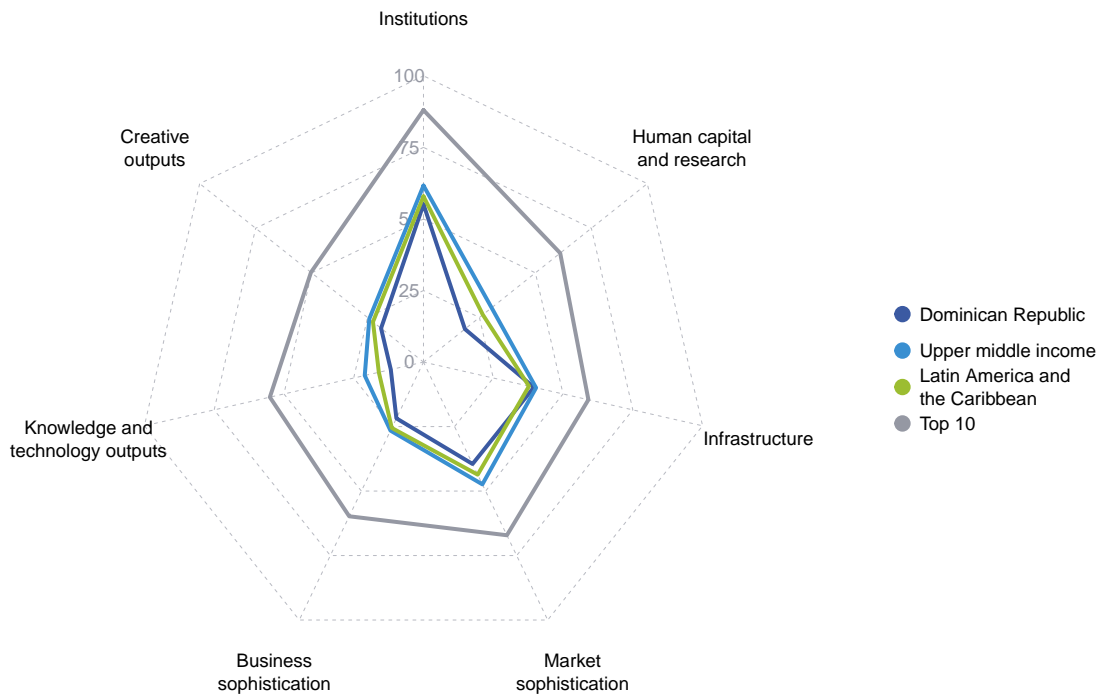
Upper middle-income group economies

Dominican Republic performs below the upper middle-income group average in all GII pillars.

Latin America and the Caribbean

Dominican Republic performs above the regional average in Infrastructure.
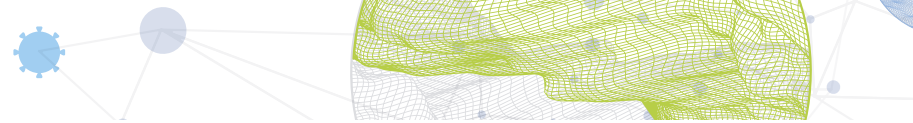
OVERVIEW OF RANKINGS IN THE SEVEN GII 2021 AREAS

Dominican Republic performs best in Infrastructure and its weakest performance is in Knowledge and technology outputs.

The seven GII pillar ranks for Dominican Republic

Pillar	Rank
Infrastructure	75
Creative outputs	84
Business sophistication	86
Global Innovation Index 2021	93
Institutions	96
Human capital and research	102
Market sophistication	104
Knowledge and technology outputs	108
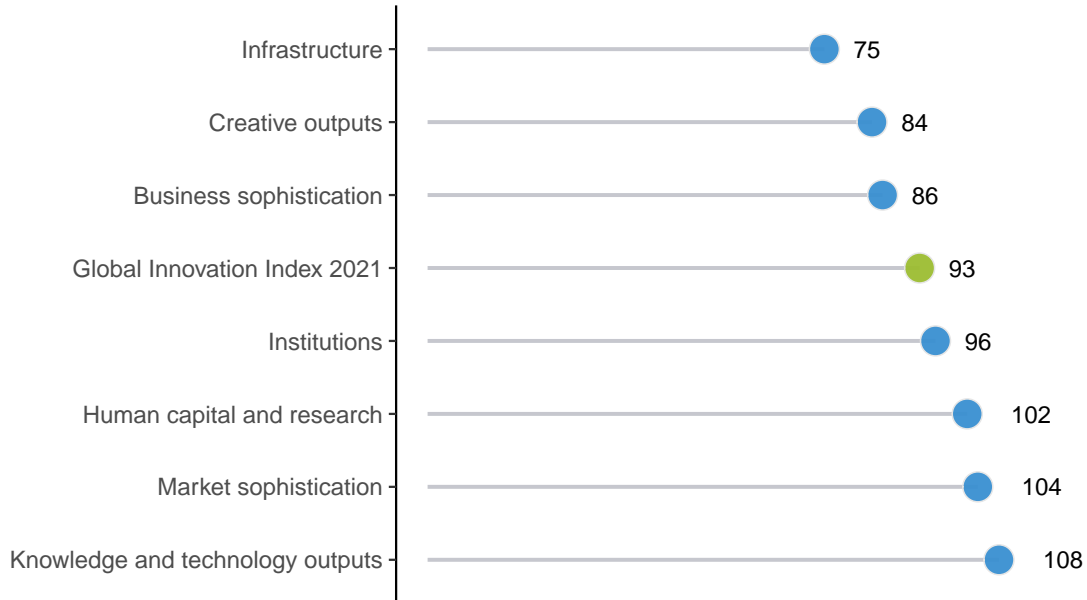
Note: The highest possible ranking in each pillar is one.
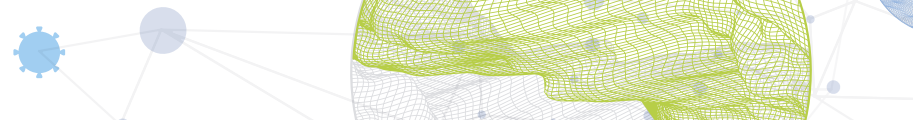
INNOVATION STRENGTHS AND WEAKNESSES

The table below gives an overview of the strengths and weaknesses of Dominican Republic in the GII 2021.

Strengths and weaknesses for Dominican Republic

| Strengths			Weaknesses		
Code	**Indicator name**	**Rank**	**Code**	**Indicator name**	**Rank**
2.2.1	Tertiary enrolment, % gross	50	2.1.4	PISA scales in reading, maths and science	79
3.1.3	Government's online service	49	2.2.2	Graduates in science and engineering, %	104
3.1.4	E-participation	51	2.3.3	Global corporate R&D investors, top 3, mn US$	41
3.3	Ecological sustainability	47	2.3.4	QS university ranking, top 3	74
3.3.1	GDP/unit of energy use	9	5.2.4	Joint venture/strategic alliance deals/bn PPP$ GDP	125
4.1.3	Microfinance gross loans, % GDP	31	6.1	Knowledge creation	128
5.2.2	State of cluster development and depth	47	6.1.4	Scientific and technical articles/bn PPP$ GDP	130
5.3.1	Intellectual property payments, % total trade	48	6.1.5	Citable documents H-index	124
5.3.4	FDI net inflows, % GDP	35	6.2.3	Software spending, % GDP	116
6.2.1	Labor productivity growth, %	28	7.1.3	Industrial designs by origin/bn PPP$ GDP	118
7.2.5	Creative goods exports, % total trade	28	7.3.4	Mobile app creation/bn PPP$ GDP	98

Dominican Republic

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP$ (bn)	GDP per capita, PPP$	GII 2020 rank
98	93	Upper middle	LCN	10.8	196.5	18,783	90

	Score/Value	Rank
🏛 **Institutions**	**55.1**	**96**
1.1 Political environment	**51.7**	**88**
1.1.1 Political and operational stability*	69.6	60
1.1.2 Government effectiveness*	42.7	91
1.2 Regulatory environment	**51.9**	**101**
1.2.1 Regulatory quality*	42.1	74
1.2.2 Rule of law*	37.6	83
1.2.3 Cost of redundancy dismissal	26.2	106
1.3 Business environment	**61.7**	**99**
1.3.1 Ease of starting a business*	85.4	85
1.3.2 Ease of resolving insolvency*	38.0	108 ◇
👥 **Human capital and research**	**18.5**	**102 ◇**
2.1 Education	**35.4**	**105 ◇**
2.1.1 Expenditure on education, % GDP	n/a	n/a
2.1.2 Government funding/pupil, secondary, % GDP/cap	13.1	82
2.1.3 School life expectancy, years ⊘	14.2	68
2.1.4 PISA scales in reading, maths and science	334.1	79 ○ ◇
2.1.5 Pupil-teacher ratio, secondary	17.7	86
2.2 Tertiary education	**20.1**	**94**
2.2.1 Tertiary enrolment, % gross ⊘	59.9	50 ●
2.2.2 Graduates in science and engineering, % ⊘	11.6	104 ○ ◇
2.2.3 Tertiary inbound mobility, % ⊘	1.7	79
2.3 Research and development (R&D)	**0.0**	**[123]**
2.3.1 Researchers, FTE/mn pop.	n/a	n/a
2.3.2 Gross expenditure on R&D, % GDP	n/a	n/a
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**	**39.6**	**75**
3.1 Information and communication technologies (ICTs)	**63.1**	**76**
3.1.1 ICT access*	46.3	95 ◇
3.1.2 ICT use*	52.3	78
3.1.3 Government's online service*	76.5	49 ●
3.1.4 E-participation*	77.4	51 ●
3.2 General infrastructure	**20.9**	**105**
3.2.1 Electricity output, GWh/mn pop.	1,849.2	84
3.2.2 Logistics performance*	28.6	85
3.2.3 Gross capital formation, % GDP	20.9	81
3.3 Ecological sustainability	**34.6**	**47 ●**
3.3.1 GDP/unit of energy use	19.4	9 ● ◆
3.3.2 Environmental performance*	46.3	68
3.3.3 ISO 14001 environmental certificates/bn PPP$ GDP	0.2	121
📊 **Market sophistication**	**39.5**	**104 ◇**
4.1 Credit	**24.2**	**117 ◇**
4.1.1 Ease of getting credit*	45.0	101 ◇
4.1.2 Domestic credit to private sector, % GDP	28.2	99
4.1.3 Microfinance gross loans, % GDP	0.6	31 ●
4.2 Investment	**34.0**	**[53]**
4.2.1 Ease of protecting minority investors*	34.0	118 ◇
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Venture capital investors, deals/bn PPP$ GDP	n/a	n/a
4.2.4 Venture capital recipients, deals/bn PPP$ GDP	n/a	n/a
4.3 Trade, diversification, and market scale	**60.3**	**94**
4.3.1 Applied tariff rate, weighted avg., % ⊘	4.2	77
4.3.2 Domestic industry diversification	n/a	n/a
4.3.3 Domestic market scale, bn PPP$	196.5	65

	Score/Value	Rank
💼 **Business sophistication**	**21.8**	**86**
5.1 Knowledge workers	**24.7**	**[86]**
5.1.1 Knowledge-intensive employment, %	16.7	91
5.1.2 Firms offering formal training, % ⊘	23.4	67
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD financed by business, %	n/a	n/a
5.1.5 Females employed w/advanced degrees, %	9.5	73
5.2 Innovation linkages	**19.4**	**73**
5.2.1 University-industry R&D collaboration†	33.0	102
5.2.2 State of cluster development and depth†	50.0	47 ●
5.2.3 GERD financed by abroad, % GDP	n/a	n/a
5.2.4 Joint venture/strategic alliance deals/bn PPP$ GDP	0.0	125 ○
5.2.5 Patent families/bn PPP$ GDP	0.0	79
5.3 Knowledge absorption	**21.4**	**85**
5.3.1 Intellectual property payments, % total trade	0.8	48 ●
5.3.2 High-tech imports, % total trade ⊘	6.5	87
5.3.3 ICT services imports, % total trade	0.3	120 ◇
5.3.4 FDI net inflows, % GDP	3.6	35 ●
5.3.5 Research talent, % in businesses	n/a	n/a
📇 **Knowledge and technology outputs**	**11.7**	**108**
6.1 Knowledge creation	**1.6**	**128 ○ ◇**
6.1.1 Patents by origin/bn PPP$ GDP	0.1	111
6.1.2 PCT patents by origin/bn PPP$ GDP	0.1	75
6.1.3 Utility models by origin/bn PPP$ GDP	0.1	56
6.1.4 Scientific and technical articles/bn PPP$ GDP	1.1	130 ○ ◇
6.1.5 Citable documents H-index	2.8	124 ○
6.2 Knowledge impact	**21.3**	**96**
6.2.1 Labor productivity growth, %	1.9	28 ●
6.2.2 New businesses/th pop. 15–64	1.5	69
6.2.3 Software spending, % GDP	0.0	116 ○ ◇
6.2.4 ISO 9001 quality certificates/bn PPP$ GDP	1.0	109
6.2.5 High-tech manufacturing, %	n/a	n/a
6.3 Knowledge diffusion	**12.2**	**83**
6.3.1 Intellectual property receipts, % total trade	n/a	n/a
6.3.2 Production and export complexity	39.7	69
6.3.3 High-tech exports, % total trade ⊘	1.8	63
6.3.4 ICT services exports, % total trade	0.4	104
🎨 **Creative outputs**	**19.0**	**84**
7.1 Intangible assets	**23.1**	**90**
7.1.1 Trademarks by origin/bn PPP$ GDP	38.3	60
7.1.2 Global brand value, top 5,000, % GDP	3.2	73
7.1.3 Industrial designs by origin/bn PPP$ GDP	0.0	118 ○
7.1.4 ICTs and organizational model creation†	48.9	85
7.2 Creative goods and services	**20.8**	**[49]**
7.2.1 Cultural and creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	3.5	53
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 ⊘	2.2	28 ●
7.3 Online creativity	**8.8**	**103**
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	2.4	73
7.3.2 Country-code TLDs/th pop. 15–69	1.3	78
7.3.3 Wikipedia edits/mn pop. 15–69	33.8	95 ◇
7.3.4 Mobile app creation/bn PPP$ GDP	0.0	98 ○

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.
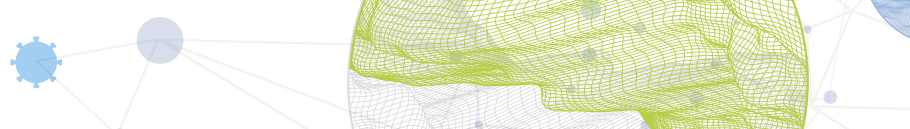
DATA AVAILABILITY

The following tables list data that are either missing or outdated for Dominican Republic.

Missing data for Dominican Republic

Code	Indicator name	Economy year	Model year	Source
2.1.1	Expenditure on education, % GDP	n/a	2017	UNESCO Institute for Statistics
2.3.1	Researchers, FTE/mn pop.	n/a	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
2.3.2	Gross expenditure on R&D, % GDP	n/a	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
4.2.2	Market capitalization, % GDP	n/a	2019	World Federation of Exchanges
4.2.3	Venture capital investors, deals/bn PPP$ GDP	n/a	2020	Refinitiv Eikon
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
5.1.3	GERD performed by business, % GDP	n/a	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
5.1.4	GERD financed by business, %	n/a	2018	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
5.2.3	GERD financed by abroad, % GDP	n/a	2018	UNESCO Institute for Statistics
5.3.5	Research talent, % in businesses	n/a	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
6.2.5	High-tech manufacturing, %	n/a	2018	United Nations Industrial Development Organization
6.3.1	Intellectual property receipts, % total trade	n/a	2019	World Trade Organization
7.2.1	Cultural and creative services exports, % total trade	n/a	2019	World Trade Organization
7.2.3	Entertainment and media market/th pop. 15–69	n/a	2020	PwC

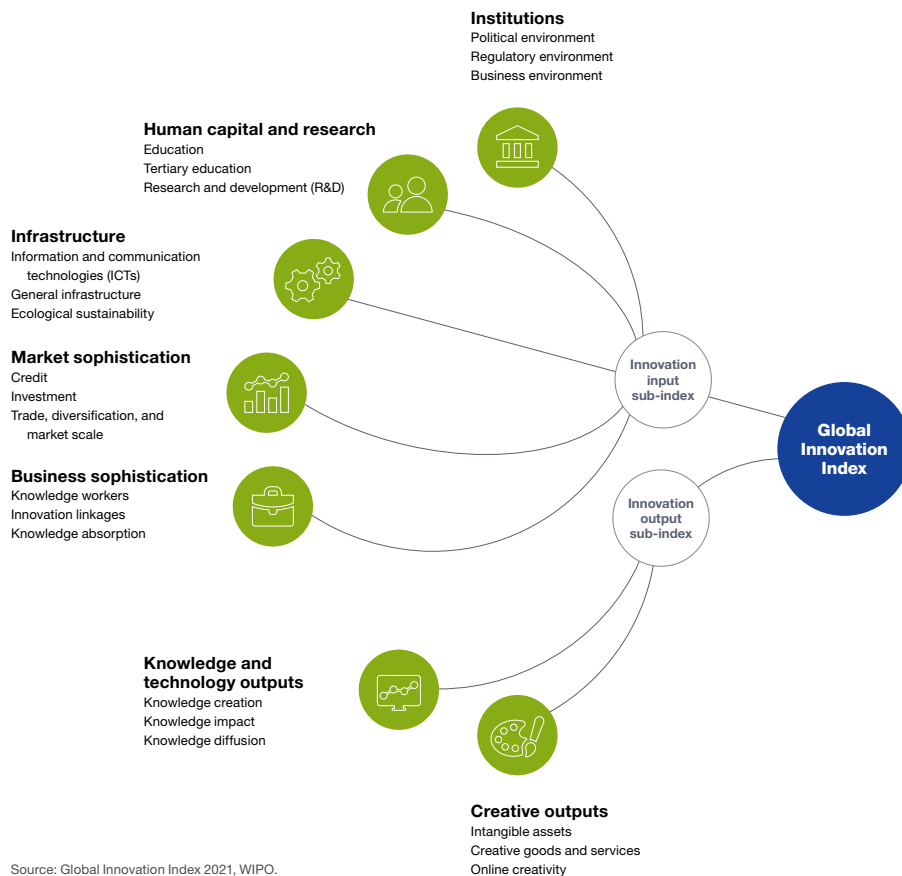| Code	Indicator name	Economy year	Model year	Source
7.2.4	Printing and other media, % manufacturing	n/a	2018	United Nations Industrial Development Organization

Outdated data for Dominican Republic

Code	Indicator name	Economy year	Model year	Source
2.1.3	School life expectancy, years	2017	2018	UNESCO Institute for Statistics
2.2.1	Tertiary enrolment, % gross	2017	2018	UNESCO Institute for Statistics
2.2.2	Graduates in science and engineering, %	2017	2018	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
2.2.3	Tertiary inbound mobility, %	2017	2018	UNESCO Institute for Statistics
4.3.1	Applied tariff rate, weighted avg., %	2018	2019	World Bank
5.1.2	Firms offering formal training, %	2016	2019	World Bank
5.3.2	High-tech imports, % total trade	2018	2019	United Nations, COMTRADE
6.3.3	High-tech exports, % total trade	2018	2019	United Nations, COMTRADE
7.2.5	Creative goods exports, % total trade	2018	2019	United Nations, COMTRADE

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.

Institutions
Political environment
Regulatory environment
Business environment

Human capital and research
Education
Tertiary education
Research and development (R&D)

Infrastructure
Information and communication
    technologies (ICTs)
General infrastructure
Ecological sustainability

Market sophistication
Credit
Investment
Trade, diversification, and
    market scale

Business sophistication
Knowledge workers
Innovation linkages
Knowledge absorption

**Knowledge and
technology outputs**
Knowledge creation
Knowledge impact
Knowledge diffusion

Creative outputs
Intangible assets
Creative goods and services
Online creativity

Innovation input sub-index

Innovation output sub-index

Global Innovation Index

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.