

# Global Innovation Index 2023

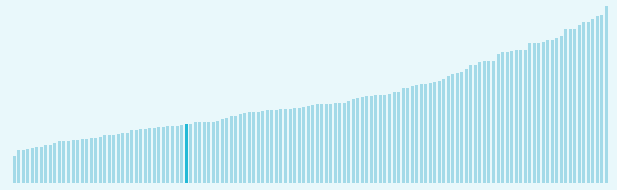


The Global Innovation Index (GII) **ranks world economies according to their innovation capabilities.**

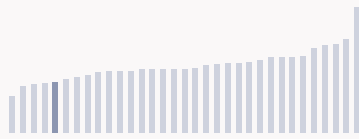
Consisting of **roughly 80 indicators**, grouped into innovation inputs and outputs, the GII **aims to capture the multi-dimensional facets of innovation.**

## Dominican Republic ranking in the Global Innovation Index 2023

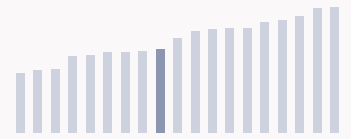
> Dominican Republic ranks **94th** among the 132 economies featured in the GII 2023.



> Dominican Republic ranks **29th** among the 33 upper-middle-income economies.



> Dominican Republic ranks **11th** among the 19 economies in Latin America and the Caribbean.



### > Dominican Republic GII Ranking (2020-2023)

The table shows the rankings of Dominican Republic over the past four years. 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 2023 is between ranks 90 and 95.

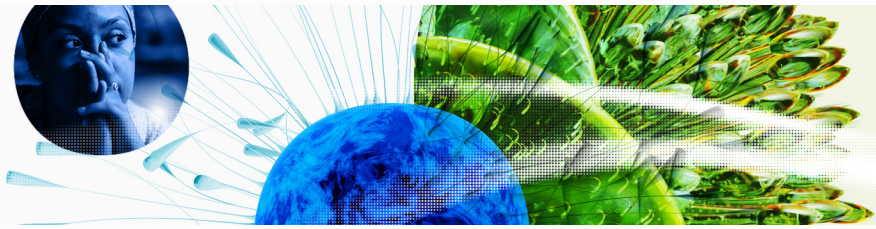
	GII Position	Innovation Inputs	Innovation Outputs
2020	90th	94th	85th
2021	93rd	93rd	98th
2022	90th	90th	92nd
2023	94th	89th	96th

Dominican Republic performs worse in innovation outputs than innovation inputs in 2023.

This year Dominican Republic ranks 89th in innovation inputs. This position is higher than last year.

Dominican Republic ranks 96th in innovation outputs. This position is lower than last year.

# Global Innovation Index 2023



## → Expected vs. observed innovation performance

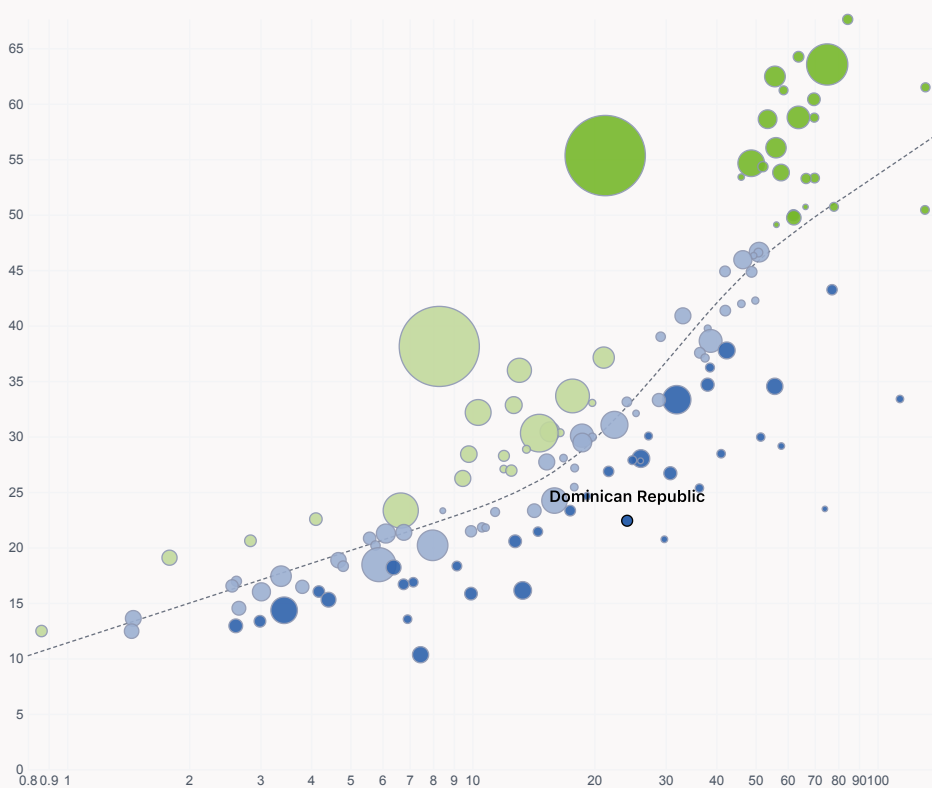
The bubble chart below shows the relationship between income levels (GDP per capita) and innovation performance (GII score). The trend line gives an indication of the expected innovation performance according to income level. Economies appearing above the trend line are performing better than expected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



> Relative to GDP, Dominican Republic's performance is below expectations for its level of development.

## > Innovation overperformers relative to their economic development

↑ **GII Score**



- Innovation leader
- Performing above expectations for level of development
- Performing at expectations for level of development
- Performing below expectations for level of development

Size legend (Population)



→ GDP per capita, PPP logarithmic scale (thousands of \$)

# Global Innovation Index 2023



## → 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.



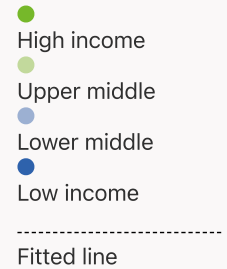
> Dominican Republic produces less innovation outputs relative to its level of innovation investments.

### > Relationship between innovation inputs and outputs

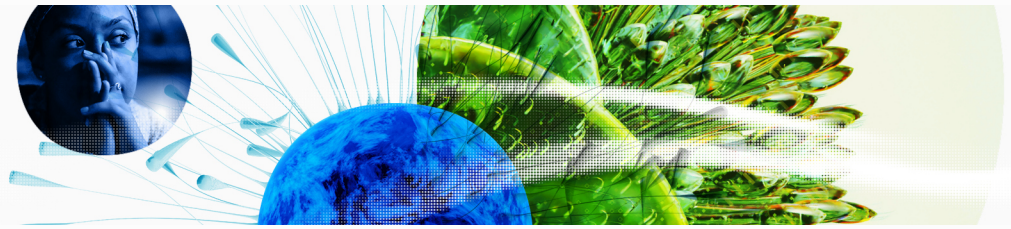
↑ Output score



→Input score



# Global Innovation Index 2023



## → Overview of Dominican Republic's rankings in the seven areas of the GII in 2023

The chart shows the ranking for each of the seven areas that the GII comprises. The strongest areas for Dominican Republic are those that rank above the GII (shown in blue) and the weakest are those that rank below.




### > Highest rankings

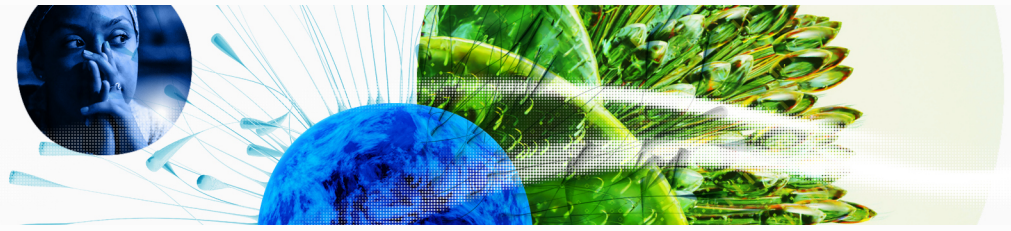
Dominican Republic ranks highest in Institutions (67th), Infrastructure (76th), Business sophistication (86th), Market sophistication (91st) and Creative outputs (94th).

### > Lowest rankings

Dominican Republic ranks lowest in Human capital and research (109th), Knowledge and technology outputs (95th) and Creative outputs, GII Index (94th).

 The full WIPO Intellectual Property Statistics profile for Dominican Republic can be found on [this link](#).

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## → Benchmark of Dominican Republic against other country groupings for each of the seven areas of the GII Index

The charts show the relative position of Dominican Republic (blue bar) against other country groupings (grey bars), for each of the seven areas of the GII Index.

### > Upper-Middle-Income economies

Dominican Republic performs below the upper-middle-income group average in Knowledge and technology outputs, Creative outputs, Business sophistication, Market sophistication, Human capital and research, Infrastructure.

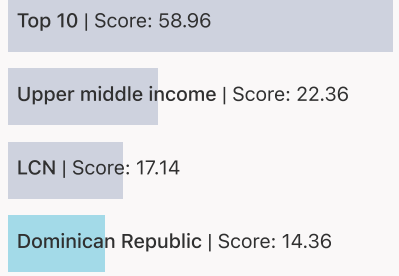


### > Latin America And The Caribbean

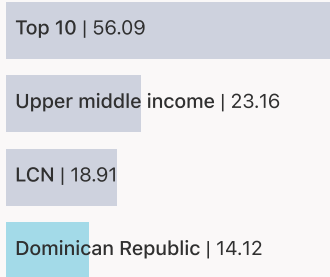
Dominican Republic performs below the regional average in Knowledge and technology outputs, Creative outputs, Business sophistication, Market sophistication, Human capital and research.



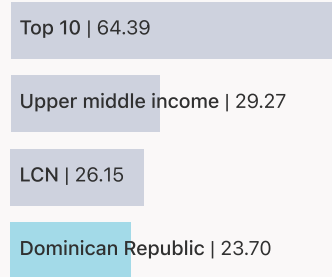
### Knowledge and technology outputs



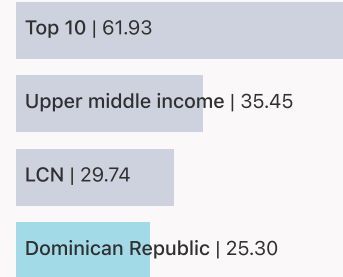
### Creative outputs



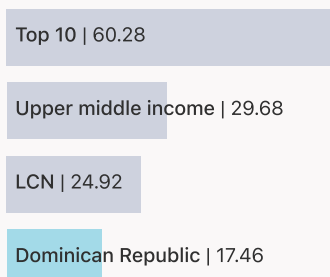
### Business sophistication



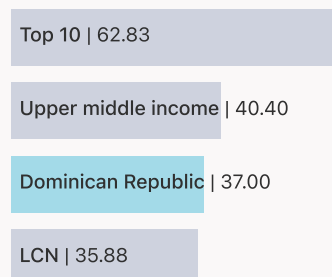
### Market sophistication



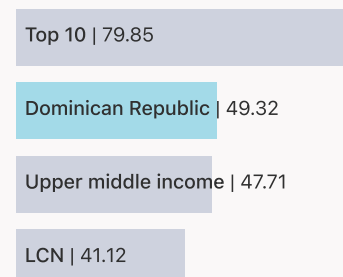
### Human capital and research



### Infrastructure



### Institutions





## → Innovation strengths and weaknesses in Dominican Republic

The table below gives an overview of the indicator strengths and weaknesses of Dominican Republic in the GII 2023.



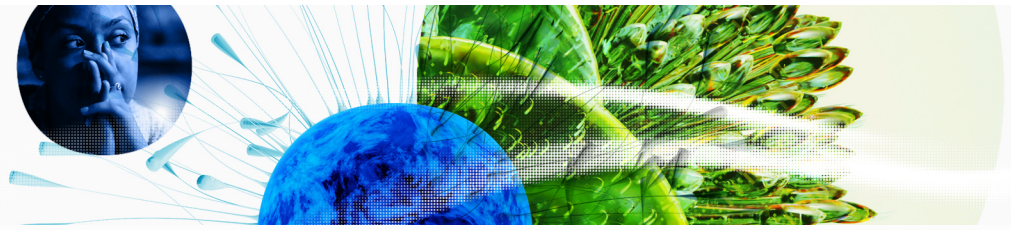
> Dominican Republic's main innovation strengths are **GDP/unit of energy use (rank 7)**, **Labor productivity growth, % (rank 16)** and **Gross capital formation, % GDP (rank 20)**.

### Strengths

### Weaknesses

Rank	Code	Indicator name	Rank	Code	Indicator name
7	3.3.1	GDP/unit of energy use	130	6.1.4	Scientific and technical articles/bn PPP\$ GDP
16	6.2.1	Labor productivity growth, %	126	6.1.1	Patents by origin/bn PPP\$ GDP
20	3.2.3	Gross capital formation, % GDP	123	5.2.4	Joint venture/strategic alliance deals/bn PPP\$ GDP
21	7.2.4	Creative goods exports, % total trade	119	7.1.4	Industrial designs by origin/bn PPP\$ GDP
41	1.3.1	Policies for doing business	114	6.3.1	Intellectual property receipts, % total trade
42	5.3.4	FDI net inflows, % GDP	83	4.1.1	Finance for startups and scaleups
52	5.3.2	High-tech imports, % total trade	79	2.1.4	PISA scales in reading, maths and science
53	6.3.3	High-tech exports, % total trade	71	2.3.4	QS university ranking, top 3
53	2.2.1	Tertiary enrolment, % gross	48	6.2.2	Unicorn valuation, % GDP
53	7.1.2	Trademarks by origin/bn PPP\$ GDP	40	2.3.3	Global corporate R&D investors, top 3, mn US\$
55	1.1.1	Operational stability for businesses			

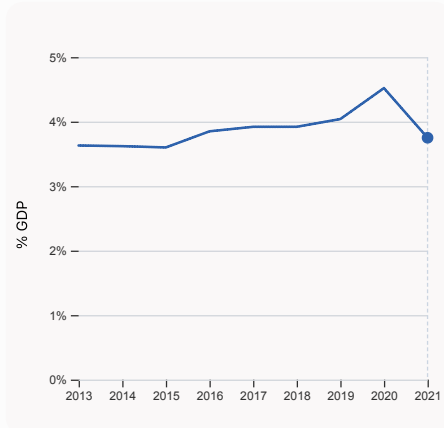
# Global Innovation Index 2023



## → Dominican Republic's innovation system

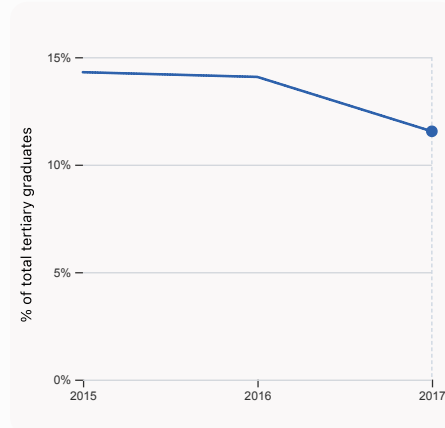
As far as practicable, the plots below present unscaled indicator data.

### > Innovation inputs in Dominican Republic



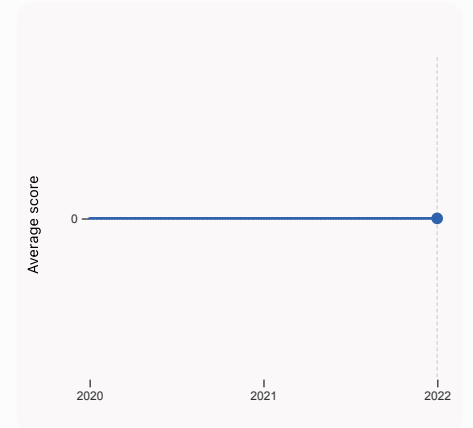
#### 2.1.1 Expenditure on education, % GDP

was equal to 3.75% GDP in 2021, down by 0.77 percentage points from the year prior – and equivalent to an indicator rank of 80.



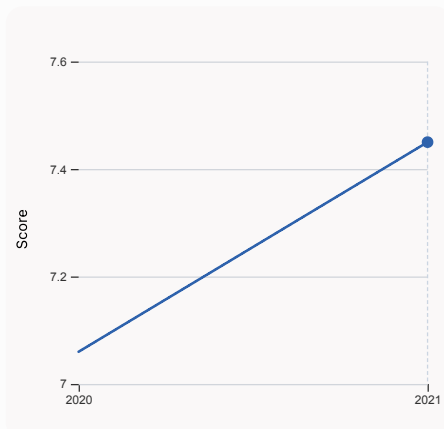
#### 2.2.2 Graduates in science and engineering, %

was equal to 11.55% of total tertiary graduates in 2017, down by 2.53 percentage points from the year prior – and equivalent to an indicator rank of 106.



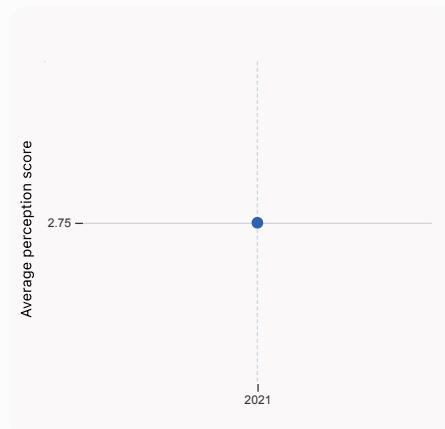
#### 2.3.4 QS university ranking, top 3

was equal to an average score of 0 for the top 3 universities in 2022, equivalent to an indicator rank of 71.



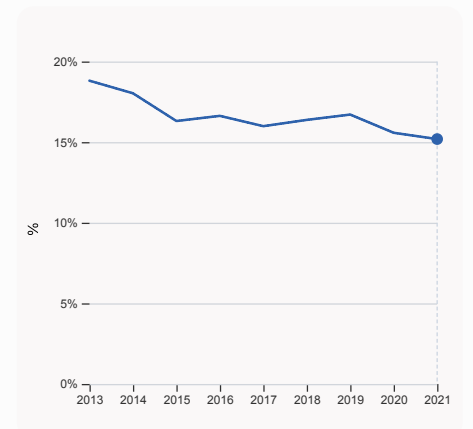
#### 3.1.1 ICT access

was equal to a score of 7.45 in 2021, up by 5.52% from the year prior – and equivalent to an indicator rank of 97.



#### 4.1.1 Finance for startups and scaleups

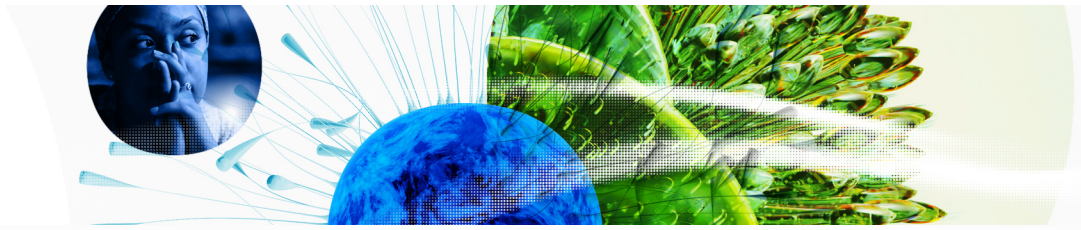
was equal to an average perception score of 2.75 in 2021, equivalent to an indicator rank of 83.



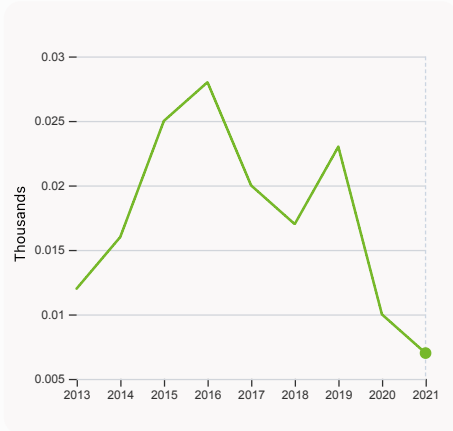
#### 5.1.1 Knowledge-intensive employment, %

was equal to 15.19% in 2021, down by 0.39 percentage points from the year prior – and equivalent to an indicator rank of 88.

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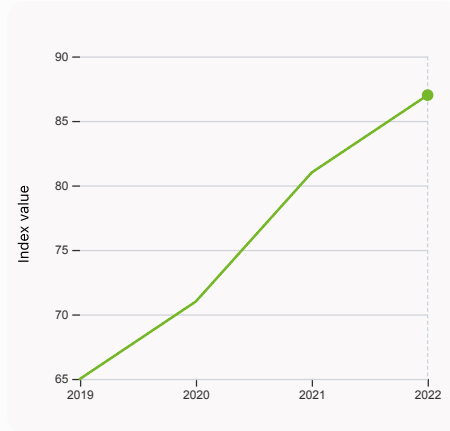


## > Innovation outputs in Dominican Republic



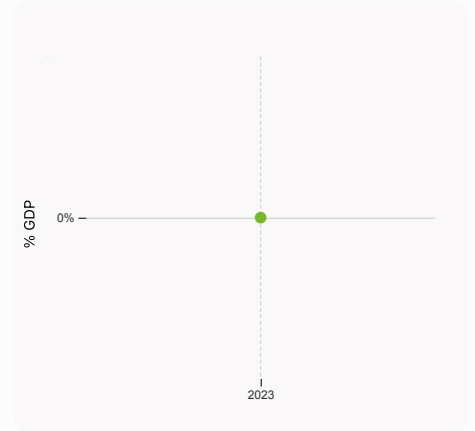
### 6.1.1 Patents by origin

was equal to 0.007 Thousands in 2021, down by 30% from the year prior – and equivalent to an indicator rank of 126.



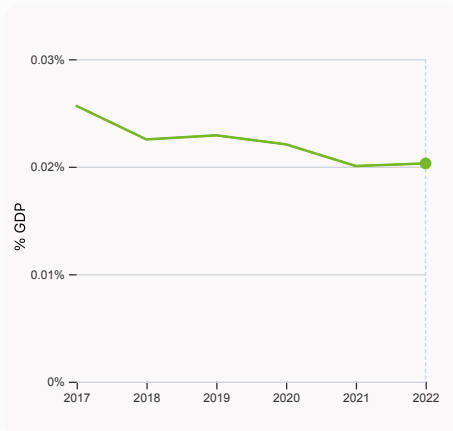
### 6.1.5 Citable documents H-index

was equal to an index value of 87 in 2022, up by 7.41% from the year prior – and equivalent to an indicator rank of 123.



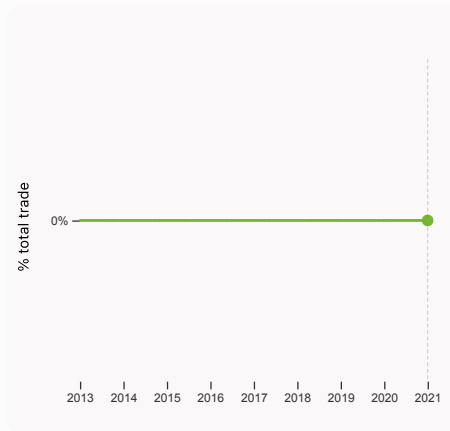
### 6.2.2 Unicorn valuation, % GDP

was equal to 0 % GDP in 2023 – and equivalent to an indicator rank of 48.



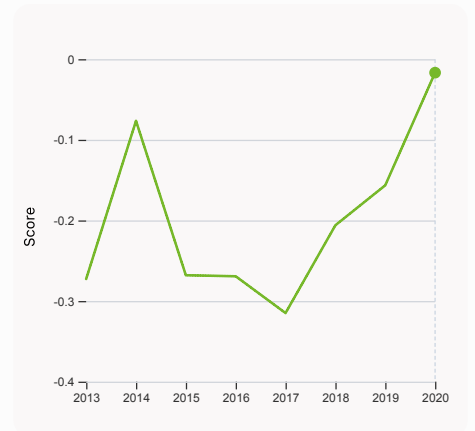
### 6.2.3 Software spending, % GDP

was equal to 0.02% GDP in 2022, up by 0.00024 percentage points from the year prior – and equivalent to an indicator rank of 122.



### 6.3.1 Intellectual property receipts, % total trade

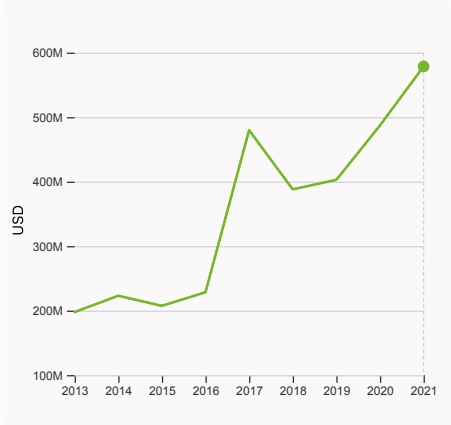
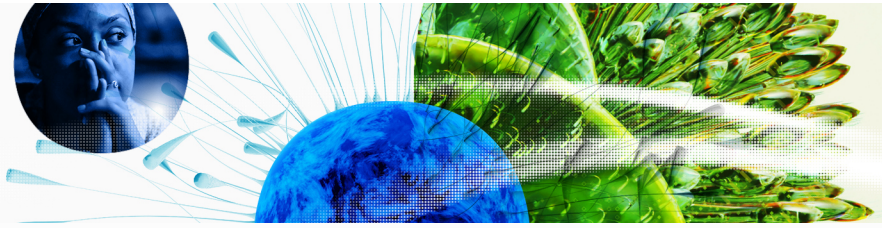
was equal to 0% total trade in 2021 – and equivalent to an indicator rank of 114.



### 6.3.2 Production and export complexity

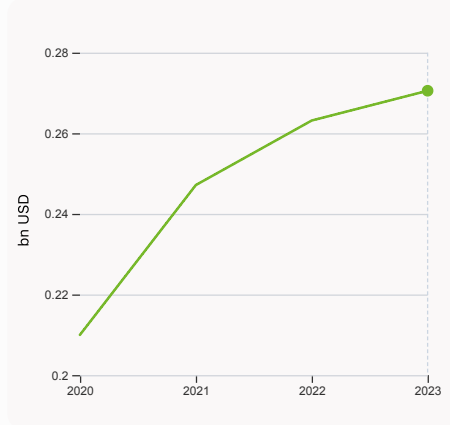
was equal to a score of -0.017 in 2020, up by 89.31% from the year prior – and equivalent to an indicator rank of 61.

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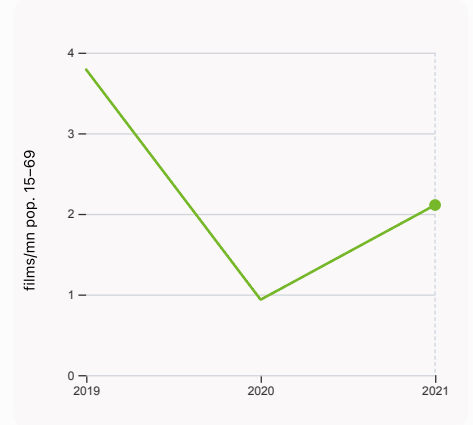
### 6.3.3 High-tech exports

was equal to 578,606,999 USD in 2021, up by 18.79% from the year prior – and equivalent to an indicator rank of 53.



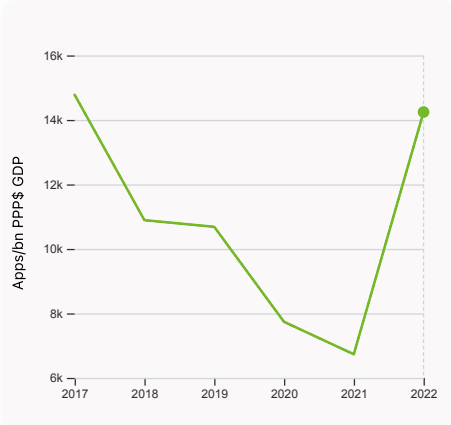
### 7.1.3 Global brand value, top 5,000

was equal to 0.271 bn USD in 2023, up by 2.81% from the year prior – and equivalent to an indicator rank of 70.



### 7.2.2 National feature films/mn pop. 15-69

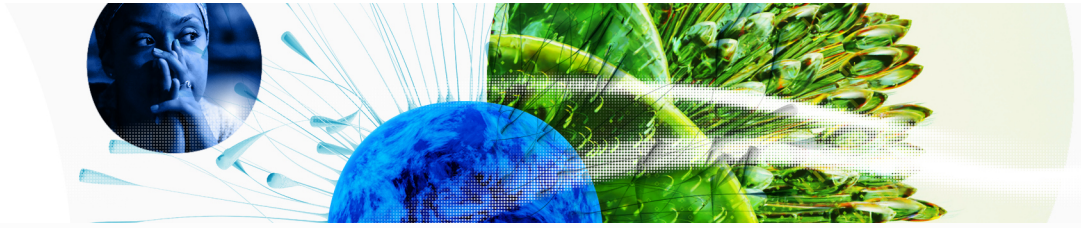
was equal to 2.11 films/mn pop. 15-69 in 2021, up by 125.46% from the year prior – and equivalent to an indicator rank of 46.



### 7.3.4 Mobile app creation/bn PPP\$ GDP

was equal to 14,244.56 Apps/bn PPP\$ GDP in 2022, up by 111.58% from the year prior – and equivalent to an indicator rank of 101.

# Global Innovation Index 2023



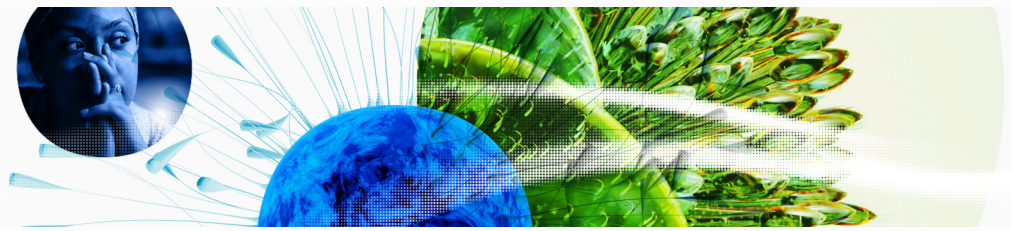
## → Dominican Republic's innovation top performers

### > 7.1.3 Top 5,000 companies in Dominican Republic with highest global brand value

Rank	Brand	Industry	Brand Value, mn USD
1	BRUGAL	Spirits	270.6

Source: Brand Finance (<https://brandirectory.com>).  
Note: Rank corresponds to within economy ranks.

# Global Innovation Index 2023



GII 2023 rank

# 94

## Dominican Republic

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$ (bn)	GDP per capita, PPP\$
96	89	Upper middle	LCN	11.2	256.4	24,119.5
Score / Value Rank				Score / Value Rank		
<b>Institutions</b> 49.3 67				<b>Business sophistication</b> 23.7 86		
<b>1.1 Institutional environment</b> 47.3 59				<b>5.1 Knowledge workers</b> 25.0 [78]		
1.1.1 Operational stability for businesses* 56.9 55 ●◆				5.1.1 Knowledge-intensive employment, % 15.2 88 ◇		
1.1.2 Government effectiveness* 37.6 68				5.1.2 Firms offering formal training, % 23.4 70		
<b>1.2 Regulatory environment</b> 52.3 93				5.1.3 GERD performed by business, % GDP n/a n/a		
1.2.1 Regulatory quality* 44.4 67				5.1.4 GERD financed by business, % n/a n/a		
1.2.2 Rule of law* 36.9 70				5.1.5 Females employed w/advanced degrees, % 9.6 77		
1.2.3 Cost of redundancy dismissal 26.2 107				<b>5.2 Innovation linkages</b> 19.2 78		
<b>1.3 Business environment</b> 48.4 61				5.2.1 University-industry R&D collaboration+ 31.1 94		
1.3.1 Policies for doing business* 58.8 41 ●◆				5.2.2 State of cluster development+ 43.9 59		
1.3.2 Entrepreneurship policies and culture* 37.9 50				5.2.3 GERD financed by abroad, % GDP n/a n/a		
<b>Human capital and research</b> 17.5 109 ◇				5.2.4 Joint venture/strategic alliance deals/bn PPP\$ GDP 0.0 123 ○		
<b>2.1 Education</b> 35.8 110 ◇				5.2.5 Patent families/bn PPP\$ GDP 0.0 65		
2.1.1 Expenditure on education, % GDP 3.7 80				<b>5.3 Knowledge absorption</b> 26.9 94		
2.1.2 Government funding/pupil, secondary, % GDP/cap 13.6 80				5.3.1 Intellectual property payments, % total trade 0.4 78		
2.1.3 School life expectancy, years 14.2 70				5.3.2 High-tech imports, % total trade 8.9 52 ●◆		
2.1.4 PISA scales in reading, maths and science 334.1 79 ○◇				5.3.3 ICT services imports, % total trade 0.4 112 ◇		
2.1.5 Pupil-teacher ratio, secondary 13.5 66				5.3.4 FDI net inflows, % GDP 3.3 42 ●◆		
<b>2.2 Tertiary education</b> 16.6 97 ◇				5.3.5 Research talent, % in businesses n/a n/a		
2.2.1 Tertiary enrolment, % gross 59.9 53 ●◆				<b>Knowledge and technology outputs</b> 14.4 95		
2.2.2 Graduates in science and engineering, % 11.6 106 ◇				<b>6.1 Knowledge creation</b> 1.0 130 ○◇		
2.2.3 Tertiary inbound mobility, % 1.7 80				6.1.1 Patents by origin/bn PPP\$ GDP 0.0 126 ○		
<b>2.3 Research and development (R&amp;D)</b> 0.0 [119]				6.1.2 PCT patents by origin/bn PPP\$ GDP 0.0 84		
2.3.1 Researchers, FTE/mn pop. n/a n/a				6.1.3 Utility models by origin/bn PPP\$ GDP 0.0 66		
2.3.2 Gross expenditure on R&D, % GDP n/a n/a				6.1.4 Scientific and technical articles/bn PPP\$ GDP n/a n/a		
2.3.3 Global corporate R&D investors, top 3, mn US\$ 0.0 40 ○◇				6.1.5 Citable documents H-index 2.4 123		
2.3.4 QS university ranking, top 3* 0.0 71 ○◇				<b>6.2 Knowledge impact</b> 24.4 76		
<b>Infrastructure</b> 37.0 76				6.2.1 Labor productivity growth, % 3.0 16 ●◆		
<b>3.1 Information and communication technologies (ICTs)</b> 58.2 85				6.2.2 Unicorn valuation, % GDP 0.0 48 ○◇		
3.1.1 ICT access* 61.6 97 ◇				6.2.3 Software spending, % GDP 0.0 122 ◇		
3.1.2 ICT use* 69.3 74				6.2.4 High-tech manufacturing, % n/a n/a		
3.1.3 Government's online service* 57.8 79				<b>6.3 Knowledge diffusion</b> 17.7 85		
3.1.4 E-participation* 44.2 83				6.3.1 Intellectual property receipts, % total trade 0.0 114 ○◇		
<b>3.2 General infrastructure</b> 20.8 88				6.3.2 Production and export complexity 52.2 61		
3.2.1 Electricity output, GWh/mn pop. 1,533.0 91 ◇				6.3.3 High-tech exports, % total trade 2.4 53 ●◆		
3.2.2 Logistics performance* 22.7 82				6.3.4 ICT services exports, % total trade 0.3 114		
3.2.3 Gross capital formation, % GDP 31.5 20 ●◆				6.3.5 ISO 9001 quality/bn PPP\$ GDP 1.0 107		
<b>3.3 Ecological sustainability</b> 31.9 49 ●◆				<b>Creative outputs</b> 14.1 94		
3.3.1 GDP/unit of energy use 21.2 7 ●◆				<b>7.1 Intangible assets</b> 9.8 108 ◇		
3.3.2 Environmental performance* 39.5 65				7.1.1 Intangible asset intensity, top 15, % n/a n/a		
3.3.3 ISO 14001 environment/bn PPP\$ GDP 0.1 120				7.1.2 Trademarks by origin/bn PPP\$ GDP 43.1 53 ●◆		
<b>Market sophistication</b> 25.3 91 ◇				7.1.3 Global brand value, top 5,000 0.2 70		
<b>4.1 Credit</b> 10.5 111 ◇				7.1.4 Industrial designs by origin/bn PPP\$ GDP 0.0 119 ○◇		
4.1.1 Finance for startups and scaleups+ 11.1 83 ○◇				<b>7.2 Creative goods and services</b> 22.3 [46]		
4.1.2 Domestic credit to private sector, % GDP 30.5 95				7.2.1 Cultural and creative services exports, % total trade n/a n/a		
4.1.3 Loans from microfinance institutions, % GDP n/a n/a				7.2.2 National feature films/mn pop. 15-69 2.1 46		
<b>4.2 Investment</b> n/a [n/a]				7.2.3 Entertainment and media market/th pop. 15-69 n/a n/a		
4.2.1 Market capitalization, % GDP n/a n/a				7.2.4 Creative goods exports, % total trade 2.7 21 ●◆		
4.2.2 Venture capital (VC) investors, deals/bn PPP\$ GDP n/a n/a				<b>7.3 Online creativity</b> 14.6 99		
4.2.3 VC recipients, deals/bn PPP\$ GDP n/a n/a				7.3.1 Generic top-level domains (TLDs)/th pop. 15-69 2.7 76		
4.2.4 VC received, value, % GDP n/a n/a				7.3.2 Country-code TLDs/th pop. 15-69 1.4 79		
<b>4.3 Trade, diversification, and market scale</b> 40.1 103 ◇				7.3.3 GitHub commits/mn pop. 15-69 3.2 87		
4.3.1 Applied tariff rate, weighted avg., % 3.9 81				7.3.4 Mobile app creation/bn PPP\$ GDP 51.0 101		
4.3.2 Domestic industry diversification n/a n/a						
4.3.3 Domestic market scale, bn PPP\$ 256.4 62						

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 appendices for details, including the year of the data, at <https://www.wipo.int/gii-ranking>. 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 indicators that are either missing or outdated for Dominican Republic.

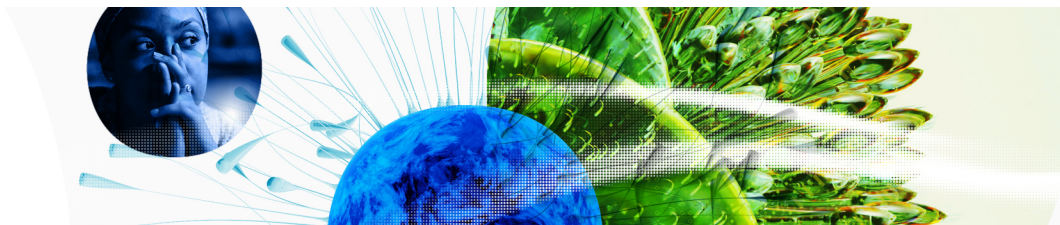


> Dominican Republic has missing data for sixteen indicators and outdated data for ten indicators.

## > Missing data for Dominican Republic

Code	Indicator name	Economy Year	Model Year	Source
2.3.1	Researchers, FTE/mn pop.	n/a	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
2.3.2	Gross expenditure on R&D, % GDP	n/a	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
4.1.3	Loans from microfinance institutions, % GDP	n/a	2021	International Monetary Fund, Financial Access Survey (FAS)
4.2.1	Market capitalization, % GDP	n/a	2020	World Federation of Exchanges; World Bank
4.2.2	Venture capital (VC) investors, deals/bn PPP\$ GDP	n/a	2022	Refinitiv; International Monetary Fund
4.2.3	VC recipients, deals/bn PPP\$ GDP	n/a	2022	Refinitiv; International Monetary Fund
4.2.4	VC received, value, % GDP	n/a	2022	Refinitiv; International Monetary Fund
4.3.2	Domestic industry diversification	n/a	2020	United Nations Industrial Development Organization
5.1.3	GERD performed by business, % GDP	n/a	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.1.4	GERD financed by business, %	n/a	2020	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.2.3	GERD financed by abroad, % GDP	n/a	2020	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.3.5	Research talent, % in businesses	n/a	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
6.2.4	High-tech manufacturing, %	n/a	2020	United Nations Industrial Development Organization
7.1.1	Intangible asset intensity, top 15, %	n/a	2022	Brand Finance
7.2.1	Cultural and creative services exports, % total trade	n/a	2021	World Trade Organization and United Nations Conference on Trade and Development
7.2.3	Entertainment and media market/th pop. 15-69	n/a	2022	PwC, GEMO; United Nations, World Population Prospects; International Monetary

# Global Innovation Index 2023

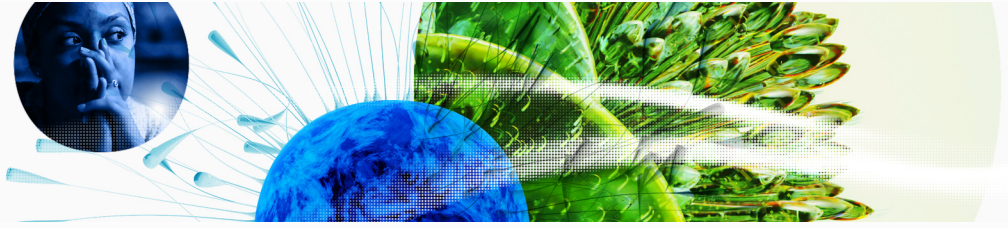


Code	Indicator name	Economy Year	Model Year	Source
				Fund

## > Outdated data for Dominican Republic

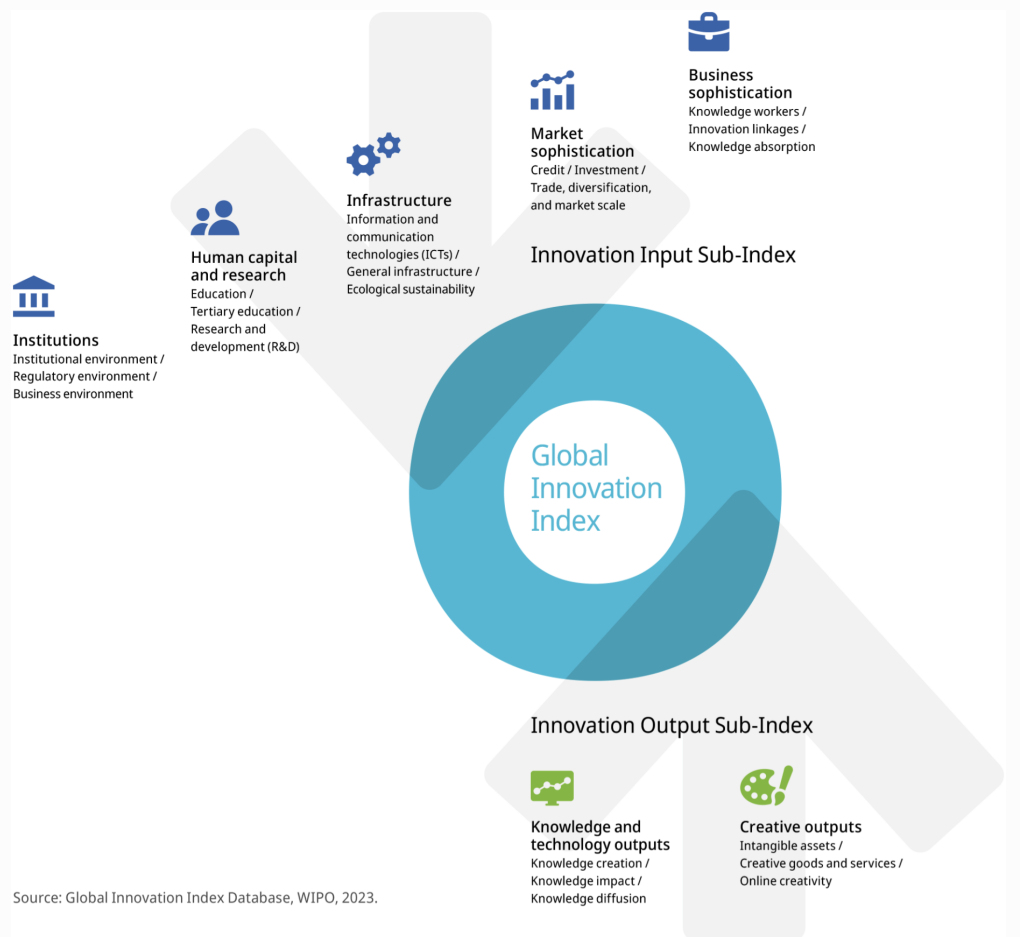
Code	Indicator name	Economy Year	Model Year	Source
1.3.2	Entrepreneurship policies and culture	2021	2022	Global Entrepreneurship Monitor
2.1.3	School life expectancy, years	2017	2020	UNESCO Institute for Statistics
2.2.1	Tertiary enrolment, % gross	2017	2020	UNESCO Institute for Statistics
2.2.2	Graduates in science and engineering, %	2017	2020	UNESCO Institute for Statistics; Eurostat; OECD
2.2.3	Tertiary inbound mobility, %	2017	2020	UNESCO Institute for Statistics
3.2.1	Electricity output, GWh/mn pop.	2020	2021	International Energy Agency
4.1.1	Finance for startups and scaleups	2021	2022	Global Entrepreneurship Monitor
5.1.1	Knowledge-intensive employment, %	2021	2022	International Labour Organization
5.1.2	Firms offering formal training, %	2016	2019	World Bank Enterprise Surveys
5.1.5	Females employed w/advanced degrees, %	2021	2022	International Labour Organization

# Global Innovation Index 2023



## → 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.



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.