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.

Jamaica ranking in the Global Innovation Index 2023

> Jamaica ranks 78th among the 132 economies featured in the GII 2023.

> Jamaica ranks 23rd among the 33 upper-middle-income group economies.

> Jamaica ranks 9th among the 19 economies in Latin America and the Caribbean.

> Jamaica GII Ranking (2020–2023)

The table shows the rankings of Jamaica 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 Jamaica in the GII 2023 is between ranks 72 and 82.

<table>
<thead>
<tr>
<th>Year</th>
<th>GII Position</th>
<th>Innovation Inputs</th>
<th>Innovation Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>72nd</td>
<td>86th</td>
<td>62nd</td>
</tr>
<tr>
<td>2021</td>
<td>74th</td>
<td>82nd</td>
<td>66th</td>
</tr>
<tr>
<td>2022</td>
<td>76th</td>
<td>88th</td>
<td>60th</td>
</tr>
<tr>
<td>2023</td>
<td>78th</td>
<td>82nd</td>
<td>69th</td>
</tr>
</tbody>
</table>

Jamaica performs better in innovation outputs than innovation inputs in 2023.

This year Jamaica ranks 82nd in innovation inputs. This position is higher than last year.

Jamaica ranks 69th 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, Jamaica is performing above expectations for its level of development.

> Innovation overperformers relative to their economic development

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

Jamaica produces more innovation outputs relative to its level of innovation investments.

Relationship between innovation inputs and outputs

![Diagram showing the relationship between innovation inputs and outputs with Jamaica highlighted above the line for high income economies.](image-url)
→ Overview of Jamaica’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 Jamaica are those that rank above the GII (shown in blue) and the weakest are those that rank below.

> Highest rankings

Jamaica ranks highest in Institutions (53rd), Creative outputs (54th) and Business sophistication (69th).

> Lowest rankings

Jamaica ranks lowest in Market sophistication (109th), Knowledge and technology outputs (92nd) and Human capital and research, Infrastructure (91st).

* Human capital and research, Infrastructure

The full WIPO Intellectual Property Statistics profile for Jamaica can be found on this link.
Benchmark of Jamaica against other country groupings for each of the seven areas of the GII Index

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

Upper-Middle-Income economies
Jamaica performs below the upper-middle-income group average in Knowledge and technology outputs, Business sophistication, Market sophistication, Human capital and research, Infrastructure.

Latin America And The Caribbean
Jamaica performs above the regional average in Creative outputs, Business sophistication, Institutions.

Knowledge and technology outputs
- Top 10 | Score: 58.96
- Upper middle income | Score: 22.36
- LCN | Score: 17.14
- Jamaica | Score: 14.68

Creative outputs
- Top 10 | 56.09
- Jamaica | 29.81
- Upper middle income | 23.16
- LCN | 18.91

Business sophistication
- Top 10 | 64.39
- Upper middle income | 29.27
- Jamaica | 27.69
- LCN | 26.15

Market sophistication
- Top 10 | 61.93
- Upper middle income | 35.45
- LCN | 29.74
- Jamaica | 22.01

Human capital and research
- Top 10 | 60.28
- Upper middle income | 29.68
- LCN | 24.92
- Jamaica | 23.14

Infrastructure
- Top 10 | 62.83
- Upper middle income | 40.40
- LCN | 35.88
- Jamaica | 31.29

Institutions
- Top 10 | 79.85
- Jamaica | 55.24
- Upper middle income | 47.71
- LCN | 41.12
### Innovation strengths and weaknesses in Jamaica

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

**Jamaica's main innovation strengths are** Government funding/pupil, secondary, % GDP/cap (rank 12), Trademarks by origin/bn PPP$ GDP (rank 18) and Market capitalization, % GDP (rank 20).

<table>
<thead>
<tr>
<th>Strengths</th>
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<tbody>
<tr>
<td>Rank</td>
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<td>7.1.2</td>
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<tr>
<td>20</td>
<td>4.2.1</td>
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<td>21</td>
<td>6.3.4</td>
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<td>6.2.3</td>
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<td>2.1.1</td>
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<td>5.3.3</td>
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<td>33</td>
<td>7.1.4</td>
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<table>
<thead>
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<th>Weaknesses</th>
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<td>114</td>
<td>6.3.3</td>
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<tr>
<td>71</td>
<td>2.3.4</td>
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<tr>
<td>48</td>
<td>6.2.2</td>
</tr>
<tr>
<td>40</td>
<td>2.3.3</td>
</tr>
</tbody>
</table>
Jamaica’s innovation system

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

Innovation inputs in Jamaica

2.1.1 Expenditure on education, % GDP
was equal to 5.16% GDP in 2019, down by 0.25 percentage points from the year prior – and equivalent to an indicator rank of 33.

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 8.56 in 2021, up by 6.47% from the year prior – and equivalent to an indicator rank of 78.

4.1.1 Finance for startups and scaleups
was equal to an average perception score of 3.69 in 2021, equivalent to an indicator rank of 69.

4.2.4 VC received, value, % GDP
was equal to 0 % GDP in 2019.

5.1.1 Knowledge-intensive employment, %
was equal to 21.64% in 2017, down by 0.37 percentage points from the year prior – and equivalent to an indicator rank of 71.
6.1.1 Patents by origin
was equal to 0.016 Thousands in 2021, up by 60% from the year prior – and equivalent to an indicator rank of 78.

6.1.5 Citable documents H-index
was equal to an index value of 129 in 2022, up by 6.61% from the year prior – and equivalent to an indicator rank of 105.

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 0.338% GDP in 2022, down by 0.0051 percentage points from the year prior – and equivalent to an indicator rank of 29.

6.3.1 Intellectual property receipts, % total trade
was equal to 0.167% total trade in 2021, up by 0.065 percentage points from the year prior – and equivalent to an indicator rank of 51.

6.3.2 Production and export complexity
was equal to a score of -0.358 in 2020, down by 76.73% from the year prior – and equivalent to an indicator rank of 82.
6.3.3 High-tech exports
was equal to 8,325,844 USD in 2021, down by 6.48% from the year prior – and equivalent to an indicator rank of 114.

7.1.1 Intangible asset intensity, top 15, %
was equal to 53.37% in 2022, down by 4.48 percentage points from the year prior – and equivalent to an indicator rank of 45.

7.1.3 Global brand value, top 5,000
was equal to 1.328 bn USD in 2023, down by 7.67% from the year prior – and equivalent to an indicator rank of 25.

7.2.1 Cultural and creative services exports
was equal to 8,228,000 USD in 2021, up by 108.94% from the year prior – and equivalent to an indicator rank of 77.

7.2.2 National feature films/mn pop. 15–69
was equal to 0.492 films/mn pop. 15–69 in 2015, down by 0.94% from the year prior – and equivalent to an indicator rank of 71.

7.3.4 Mobile app creation/bn PPP$ GDP
was equal to 7,570.66 Apps/bn PPP$ GDP in 2022, up by 76.1% from the year prior – and equivalent to an indicator rank of 103.
Jamaica's innovation top performers

7.1.1 Top 15 intangible-asset intensive companies in Jamaica

<table>
<thead>
<tr>
<th>Rank</th>
<th>Firm</th>
<th>Intensity, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NCB FINANCIAL GROUP LTD</td>
<td>34.50</td>
</tr>
<tr>
<td>2</td>
<td>SAGICOR GROUP JAMAICA LTD</td>
<td>38.50</td>
</tr>
<tr>
<td>3</td>
<td>BARITA INVESTMENTS LTD</td>
<td>60.43</td>
</tr>
</tbody>
</table>

Note: Brand Finance only provides within economy ranks.

7.1.3 Top 5,000 companies in Jamaica with highest global brand value

<table>
<thead>
<tr>
<th>Rank</th>
<th>Brand</th>
<th>Industry</th>
<th>Brand Value, mn USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CAPTAIN MORGAN</td>
<td>Spirits</td>
<td>993.3</td>
</tr>
<tr>
<td>2</td>
<td>DIGICEL</td>
<td>Telecoms</td>
<td>334.6</td>
</tr>
</tbody>
</table>

Note: Rank corresponds to within economy ranks.
# Global Innovation Index 2023

## Jamaica

**Output rank** 69  |  **Input rank** 82  |  **Income Region** LCN  |  **Population (mn)** 2.8  |  **GDP, PPP$ (bn)** 32.8  |  **GDP per capita, PPP$** 11,962.4

### Business sophistication

- **Knowledge workers** 21.9  |  59
- **Knowledge-intensive employment, %** 21.6  |  71
- **Firms offering formal training, %** 26
- **GERD performed by business, % GDP** 24
- **GERD financed by business, %** 17
- **Females employed w/advanced degrees, %** 4.1  |  96
- **Innovation linkages** 24.7  |  56
- **University-industry R&D collaboration** 42.6  |  69
- **State of cluster development** 37.6  |  81
- **GERD financed by abroad, % GDP** 27
- **Joint venture/strategic alliance deals/bn PPP$ GDP** 27
- **Patent families/bn PPP$ GDP** 0.9  |  5
- **Knowledge absorption** 36.4  |  53
- **Intellectual property payments, % total trade** 1.3  |  35
- **High-tech imports, % total trade** 5.3  |  109
- **ICT services imports, % total trade** 2.1  |  33
- **FDI net inflows, % GDP** 2.8  |  56
- **Research talent, % in businesses** 27

### Knowledge and technology outputs

- **Knowledge creation** 6.3  |  104
- **Patents by origin/bn PPP$ GDP** 0.5  |  78
- **PCT patents by origin/bn PPP$ GDP** 0.1  |  72
- **Utility models by origin/bn PPP$ GDP** 0.4  |  80
- **Scientific and technical articles/bn PPP$ GDP** 0.4  |  80
- **Oatile documents H cited** 4.8  |  105
- **Knowledge impact** 19.7  |  107
- **Labor productivity growth, %** -1.6  |  125
- **Unicorn valuation, % GDP** 0.6  |  48
- **Software spending, % GDP** 3.3  |  40
- **High-tech manufacturing, % GDP** 27
- **Knowledge diffusion** 18.0  |  81
- **Intellectual property receipts, % total trade** 0.5  |  1
- **Production and export complexity** 45.0  |  82
- **High-tech exports, % total trade** 0.3  |  14
- **ICT services exports, % total trade** 4.6  |  21
- **ISO 9001 quality/bn PPP$ GDP** 1.2  |  101

### Creative outputs

- **Intangible assets** 51.8  |  22
- **Intangible asset intensity, top 15%, %** 53.4  |  45
- **Trademarks by origin/bn PPP$ GDP** 86.4  |  18
- **Global brand value, top 5,000** 8.1  |  26
- **Industrial designs by origin/bn PPP$ GDP** 3.2  |  33
- **Creative goods exports, % total trade** 0.1  |  77
- **Online creativity** 13.5  |  104
- **Generic top-level domains (TLDs)/th pop. 15-69** 1.9  |  87
- **Country-code TLDs/th pop. 15-69** 1.1  |  88
- **GitHub commits/th pop. 15-69** 3.1  |  39
- **Mobile app creation/bn PPP$ GDP** 47.8  |  103

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**Notes:**  
- **A** indicates a strength;  
- **O** a weakness;  
- **S** an income group strength;  
- **W** an income group weakness;  
- **I** an index;  
- **Q** a survey question;  
- **E** indicates 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](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 Jamaica.

> Jamaica has missing data for eighteen indicators and outdated data for eleven indicators.

### Missing data for Jamaica

<table>
<thead>
<tr>
<th>Code</th>
<th>Indicator name</th>
<th>Economy Year</th>
<th>Model Year</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.3</td>
<td>School life expectancy, years</td>
<td>n/a</td>
<td>2020</td>
<td>UNESCO Institute for Statistics</td>
</tr>
<tr>
<td>2.1.4</td>
<td>PISA scales in reading, maths and science</td>
<td>n/a</td>
<td>2018</td>
<td>OECD, PISA</td>
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<tr>
<td>2.2.2</td>
<td>Graduates in science and engineering, %</td>
<td>n/a</td>
<td>2020</td>
<td>UNESCO Institute for Statistics; Eurostat; OECD</td>
</tr>
<tr>
<td>2.2.3</td>
<td>Tertiary inbound mobility, %</td>
<td>n/a</td>
<td>2020</td>
<td>UNESCO Institute for Statistics</td>
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<tr>
<td>2.3.1</td>
<td>Researchers, FTE/mn pop.</td>
<td>n/a</td>
<td>2021</td>
<td>UNESCO Institute for Statistics; Eurostat; OECD; RICYT</td>
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<tr>
<td>2.3.2</td>
<td>Gross expenditure on R&amp;D, % GDP</td>
<td>n/a</td>
<td>2021</td>
<td>UNESCO Institute for Statistics; Eurostat; OECD; RICYT</td>
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<tr>
<td>4.1.3</td>
<td>Loans from microfinance institutions, % GDP</td>
<td>n/a</td>
<td>2021</td>
<td>International Monetary Fund, Financial Access Survey (FAS)</td>
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<tr>
<td>4.2.3</td>
<td>VC recipients, deals/bn PPP$ GDP</td>
<td>n/a</td>
<td>2022</td>
<td>Refinitiv; International Monetary Fund</td>
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<td>4.2.4</td>
<td>VC received, value, % GDP</td>
<td>n/a</td>
<td>2022</td>
<td>Refinitiv; International Monetary Fund</td>
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<td>4.3.2</td>
<td>Domestic industry diversification</td>
<td>n/a</td>
<td>2020</td>
<td>United Nations Industrial Development Organization</td>
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<td>5.1.2</td>
<td>Firms offering formal training, %</td>
<td>n/a</td>
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<td>World Bank Enterprise Surveys</td>
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<td>5.1.3</td>
<td>GERD performed by business, % GDP</td>
<td>n/a</td>
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<td>UNESCO Institute for Statistics; Eurostat; OECD; RICYT</td>
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<td>5.1.4</td>
<td>GERD financed by business, %</td>
<td>n/a</td>
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<td>5.2.3</td>
<td>GERD financed by abroad, % GDP</td>
<td>n/a</td>
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<td>5.3.5</td>
<td>Research talent, % in businesses</td>
<td>n/a</td>
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<td>Utility models by origin/bn PPP$ GDP</td>
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<td>Economy Year</td>
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<td>Source</td>
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<td>6.2.4</td>
<td>High-tech manufacturing, %</td>
<td>n/a</td>
<td>2020</td>
<td>United Nations Industrial Development Organization</td>
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<td>7.2.3</td>
<td>Entertainment and media market pop. 15-69</td>
<td>n/a</td>
<td>2022</td>
<td>PwC, CEMCO; United Nations, World Population Prospects; International Monetary Fund</td>
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# Outdated data for Jamaica

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<tr>
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<th>Model Year</th>
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<td>1.3.1</td>
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<td>2022</td>
<td>World Economic Forum, Executive Opinion Survey (EOS)</td>
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<td>1.3.2</td>
<td>Entrepreneurship policies and culture</td>
<td>2021</td>
<td>2022</td>
<td>Global Entrepreneurship Monitor</td>
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<td>Expenditure on education, % GDP</td>
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<td>2021</td>
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<td>Tertiary enrolment, % gross</td>
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<td>2022</td>
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<td>5.2.1</td>
<td>University-industry R&amp;D collaboration</td>
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<td>2022</td>
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<td>State of cluster development</td>
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<td>2022</td>
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<td>7.2.2</td>
<td>National feature films/mn pop. 15-89</td>
<td>2015</td>
<td>2021</td>
<td>OMDIA; United Nations, World Population Prospects</td>
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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.