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 the Republic of Moldova 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 the Republic of Moldova in the GII 2020 is between ranks 48 and 60.

### Rankings of Republic of Moldova (2018–2020)

<table>
<thead>
<tr>
<th>Year</th>
<th>GII</th>
<th>Innovation inputs</th>
<th>Innovation outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>59</td>
<td>75</td>
<td>48</td>
</tr>
<tr>
<td>2019</td>
<td>58</td>
<td>81</td>
<td>45</td>
</tr>
<tr>
<td>2018</td>
<td>48</td>
<td>79</td>
<td>37</td>
</tr>
</tbody>
</table>

- The Republic of Moldova performs better in innovation outputs than innovation inputs in 2020.
- This year the Republic of Moldova ranks 75th in innovation inputs, higher than last year and higher compared to 2018.
- As for innovation outputs, the Republic of Moldova ranks 48th. This position is lower than last year and lower compared to 2018.

Republic of Moldova ranks 6th among the 29 lower middle-income group economies.

Republic of Moldova ranks 36th among the 39 economies in Europe.
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, the Republic of Moldova’s performance is above expectations for its level of development.

The positive relationship between innovation and development

- GII score
- GDP per capita in PPP$
- Logarithmic scale
- Bubbles sized by population
- Innovation leaders
- 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.

The Republic of Moldova produces more innovation outputs relative to its level of innovation investments.
BENCHMARKING REPUBLIC OF MOLDOVA AGAINST OTHER LOWER MIDDLE-INCOME GROUP ECONOMIES AND EUROPE

Republic of Moldova’s scores in the seven GII pillars

Lower middle-income group economies

The Republic of Moldova has high scores in all GII pillars.

Europe

The Republic of Moldova performs below the regional average in all GII pillars.
OVERVIEW OF REPUBLIC OF MOLDOVA RANKINGS IN THE SEVEN GII AREAS

The Republic of Moldova performs best in Market sophistication and its weakest performance is in Infrastructure and in Business sophistication.

INNOVATION STRENGTHS AND WEAKNESSES

The table below gives an overview of the strengths and weaknesses of the Republic of Moldova in the GII 2020.

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Code</th>
<th>Indicator name</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3.1</td>
<td>Ease of starting a business*</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>2.1.1</td>
<td>Expenditure on education, % GDP</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>2.1.2</td>
<td>Government funding/pupil, secondary, % GDP/cap</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>6.1.1</td>
<td>Patents by origin/bn PPP$ GDP</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>6.1.3</td>
<td>Utility models by origin/bn PPP$ GDP</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>6.2.1</td>
<td>Growth rate of PPP$ GDP/worker, %</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>6.3.3</td>
<td>ICT services exports, % total trade</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>7.1</td>
<td>Intangible assets</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>7.1.1</td>
<td>Trademarks by origin/bn PPP$ GDP</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>7.1.3</td>
<td>Industrial designs by origin/bn PPP$ GDP</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>7.3.4</td>
<td>Mobile app creation/bn PPP$ GDP</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weaknesses</th>
<th>Code</th>
<th>Indicator name</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.3.3</td>
<td>Global R&amp;D companies, top 3, mn US$</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>2.3.4</td>
<td>QS university ranking, average score top 3*</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>3.2</td>
<td>General infrastructure</td>
<td>112</td>
<td></td>
</tr>
<tr>
<td>3.2.2</td>
<td>Logistics performance*</td>
<td>108</td>
<td></td>
</tr>
<tr>
<td>3.3.1</td>
<td>GDP/unit of energy use</td>
<td>112</td>
<td></td>
</tr>
<tr>
<td>4.1.2</td>
<td>Domestic credit to private sector, % GDP</td>
<td>108</td>
<td></td>
</tr>
<tr>
<td>4.3.3</td>
<td>Domestic market scale, bn PPP$</td>
<td>123</td>
<td></td>
</tr>
<tr>
<td>5.2</td>
<td>Innovation linkages</td>
<td>122</td>
<td></td>
</tr>
<tr>
<td>5.2.1</td>
<td>University/industry research collaboration†</td>
<td>116</td>
<td></td>
</tr>
<tr>
<td>5.2.2</td>
<td>State of cluster development†</td>
<td>126</td>
<td></td>
</tr>
<tr>
<td>7.1.2</td>
<td>Global brand value, top 5000, % GDP</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>7.2.2</td>
<td>National feature films/mn pop. 15–69</td>
<td>103</td>
<td></td>
</tr>
</tbody>
</table>
STRENGTHS

GII strengths for the Republic of Moldova are found in four of the seven GII pillars.

- Institutions (81): exhibits strengths in the indicator Ease of starting a business (12).
- Human capital & research (75): shows strengths in the indicators Expenditure on education (20) and Government funding/pupil (11).
- Knowledge & technology outputs (51): reveals strengths in the indicators Patents by origin (28), Utility models by origin (4), Growth rate of PPP$ GDP/worker (14) and ICT services exports (13).
- Creative outputs (51): displays strengths in the sub-pillar Intangible assets (25) and in the indicators Trademarks by origin (8), Industrial designs by origin (5) and Mobile app creation (20).

WEAKNESSES

GII weaknesses for the Republic of Moldova are found in five of the seven GII pillars.

- Human capital & research (75): exhibits weaknesses in the indicators Global R&D companies (42) and QS university ranking (77).
- Infrastructure (88): displays weaknesses in the sub-pillar General infrastructure (112) and in the indicators Logistics performance (108) and GDP/unit of energy use (112).
- Market sophistication (42): shows weaknesses in the indicators Domestic credit to private sector (108) and Domestic market scale (123).
- Business sophistication (88): demonstrates weaknesses in the sub-pillar Innovation linkages (122) and in the indicators University/industry research collaboration (116) and State of cluster development (126).
- Creative outputs (51): reveals weaknesses in the indicators Global brand value (80) and National feature films (103).
**REPUBLIC OF MOLDOVA**

**GII 2020 rank**

<table>
<thead>
<tr>
<th>Output rank</th>
<th>Input rank</th>
<th>Income</th>
<th>Region</th>
<th>Population (mn)</th>
<th>GDP, PPP$</th>
<th>GDP per capita, PPP$</th>
</tr>
</thead>
<tbody>
<tr>
<td>48</td>
<td>75</td>
<td>Lower middle</td>
<td>EUR 4.0</td>
<td>27.3</td>
<td>6,725.2</td>
<td></td>
</tr>
</tbody>
</table>

**GII 2019 rank**

<table>
<thead>
<tr>
<th>Output rank</th>
<th>Input rank</th>
<th>Income</th>
<th>Region</th>
<th>Population (mn)</th>
<th>GDP, PPP$</th>
<th>GDP per capita, PPP$</th>
</tr>
</thead>
<tbody>
<tr>
<td>58</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### INSTITUTIONS

<table>
<thead>
<tr>
<th>Score/Value</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>59.1</td>
<td>81</td>
</tr>
</tbody>
</table>

1.1 Political environment...

1.1.1 Political and operational stability* ...

1.1.2 Government effectiveness* ...

1.2 Regulatory environment...

1.2.1 Regulatory quality* ...

1.2.2 Rule of law* ...

1.2.3 Cost of redundancy dismissal, salary weeks ...

1.3 Business environment...

1.3.1 Ease of starting a business* ...

1.3.2 Ease of resolving insolvency* ...

### HUMAN CAPITAL & RESEARCH

<table>
<thead>
<tr>
<th>Score/Value</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>27.9</td>
<td>75</td>
</tr>
</tbody>
</table>

2.1 Education...

2.1.1 Expenditure on education, % GDP ...

2.1.2 Government funding/ pupil, secondary, % GDP/pupil ...

2.1.3 School life expectancy, years ...

2.1.4 PISA scales in reading, maths, & science ...

2.1.5 Pupil-teacher ratio, secondary ...

2.2 Tertiary education...

2.2.1 Tertiary enrolment, % gross ...

2.2.2 Graduates in science & engineering, % ...

2.2.3 Tertiary inbound mobility, % ...

2.3 Research & development (R&D).

2.3.1 Researchers, FTE/million population ...

2.3.2 Gross expenditure on R&D, % GDP ...

2.3.3 Global R&D companies, avg. exp. top 5, mn $US ...

2.3.4 QS university ranking, average score top 500 ...

### INFRASTRUCTURE

<table>
<thead>
<tr>
<th>Score/Value</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>35.4</td>
<td>88</td>
</tr>
</tbody>
</table>

3.1 Information & communication technologies (ICTs)...

3.1.1 ICT access* ...

3.1.2 ICT use* ...

3.1.3 Government’s online service* ...

3.1.4 E-participation* ...

3.2 General infrastructure...

3.2.1 Electricity output, TWh/mn pop ...

3.2.2 Logistics performance* ...

3.2.3 Gross capital formation, % GDP ...

3.3 Ecological sustainability...

3.3.1 GDP/unit of energy use ...

3.3.2 Environmental performance* ...

3.3.3 ISO 14001 environmental certificates/bn PPP$ GDP ...

### MARKET SOPHISTICATION

<table>
<thead>
<tr>
<th>Score/Value</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>51.5</td>
<td>42</td>
</tr>
</tbody>
</table>

4.1 Credit...

4.1.1 Ease of getting credit* ...

4.1.2 Domestic credit to private sector, % GDP ...

4.1.3 Microfinance gross loans, % GDP ...

4.2 Investment...

4.2.1 Ease of protecting minority investors* ...

4.2.2 Market capitalization, % GDP ...

4.2.3 Venture capital deals/bn PPP$ GDP ...

4.3 Trade, competition, and market scale...

4.3.1 Applied tariff rate, weighted avg, % ...

4.3.2 Intensity of local competition ...

4.3.3 Domestic market scale, bn PPP$ ...

### BUSINESS SOPHISTICATION

<table>
<thead>
<tr>
<th>Score/Value</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.0</td>
<td>88</td>
</tr>
</tbody>
</table>

5.1 Knowledge workers...

5.1.1 Knowledge-intensive employment, % ...

5.1.2 Firms offering formal training, % ...

5.1.3 GERD performed by business, % GDP ...

5.1.4 GERD financed by business, % ...

5.1.5 Females employed w/advanced degrees, % ...

5.2 Innovation linkages...

5.2.1 University-industry research collaboration ...

5.2.2 State of cluster development ...

5.2.3 GERD financed by abroad, % GDP ...

5.2.4 JVs-strategic alliances deals/bn PPP$ GDP ...

5.2.5 Patent families 2+ offices/bn PPP$ GDP ...

5.3 Knowledge absorption...

5.3.1 Intellectual property payments, % total trade ...

5.3.2 High tech imports, % total trade ...

5.3.3 ICT services imports, % total trade ...

5.3.4 FDI net inflows, % GDP ...

5.3.5 Research output, % in business enterprise ...

### KNOWLEDGE & TECHNOLOGY OUTPUTS...

<table>
<thead>
<tr>
<th>Score/Value</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.3</td>
<td>51</td>
</tr>
</tbody>
</table>

6.1 Knowledge creation...

6.1.1 Patents by origin/bn PPP$ GDP ...

6.1.2 ICT patents by origin/bn PPP$ GDP ...

6.1.3 Utility models by origin/bn PPP$ GDP ...

6.1.4 Scientific & technical articles/bn PPP$ GDP ...

6.1.5 Citable documents H-index ...

6.2 Knowledge impact...

6.2.1 Growth rate of PPP$ GDP/worker, % ...

6.2.2 New businesses/1000 pop ...

6.2.3 Computer software spending, % GDP ...

6.2.4 ISO 9001 quality certificates/bn PPP$ GDP ...

6.2.5 High end -medium high-tech manufacturing, % ...

6.3 Knowledge diffusion...

6.3.1 Intellectual property exports, % total trade ...

6.3.2 High tech net exports, % total trade ...

6.3.3 ICT services exports, % total trade ...

6.3.4 FDI outflows, % GDP ...

### CREATIVE OUTPUTS

<table>
<thead>
<tr>
<th>Score/Value</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>27.3</td>
<td>51</td>
</tr>
</tbody>
</table>

7.1 Intangible assets...

7.1.1 Trademarks by origin/bn PPP$ GDP ...

7.1.2 Goodwill brand value, top 500, % GDP ...

7.1.3 Industrial designs by origin/bn PPP$ GDP ...

7.1.4 ICTs & organizational model creation ...

7.2 Creative goods and services...

7.2.1 Cultural & creative services exports, % total trade ...

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

7.2.3 Entertainment & Media market/bn pop, 15-69 ...

7.2.4 Printing and other media, % manufacturing ...

7.2.5 Creative goods exports, % total trade ...

7.3 Online creativity...

7.3.1 Generic top-level domains (TLDs)/bn pop ...

7.3.2 Country-code TLDs/bn pop ...

7.3.3 Wikileaks editions/bn pop ...

7.3.4 Mobile app creation/bn PPP$ GDP ...

### NOTES

- * indicates a strength; ○ a weakness; + an income group strength; - an income group weakness; □ an indicator; ● a survey question; ○ indicates that the economy’s data are older than the base year; see Appendix I for details, including the year of the data, at http://globalinnovationindex.org. Square brackets [ ] indicate that the data minimum coverage (GMC) 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 Republic of Moldova.

**Missing data**

<table>
<thead>
<tr>
<th>Code</th>
<th>Indicator name</th>
<th>Country year</th>
<th>Model year</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2.2</td>
<td>Market capitalization, % GDP</td>
<td>n/a</td>
<td>2018</td>
<td>World Federation of Exchanges</td>
</tr>
<tr>
<td>4.2.3</td>
<td>Venture capital deals/bn PPP$ GDP</td>
<td>n/a</td>
<td>2019</td>
<td>Thomson Reuters</td>
</tr>
<tr>
<td>5.2.4</td>
<td>JV–strategic alliance deals/bn PPP$ GDP</td>
<td>n/a</td>
<td>2019</td>
<td>Thomson Reuters</td>
</tr>
<tr>
<td>7.2.3</td>
<td>Entertainment &amp; Media market/th pop. 15–69</td>
<td>n/a</td>
<td>2018</td>
<td>PwC</td>
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</table>

**Outdated data**

<table>
<thead>
<tr>
<th>Code</th>
<th>Indicator name</th>
<th>Country year</th>
<th>Model year</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.3.1</td>
<td>Applied tariff rate, weighted avg., %</td>
<td>2016</td>
<td>2018</td>
<td>World Bank</td>
</tr>
<tr>
<td>7.2.2</td>
<td>National feature films/mn pop. 15–69</td>
<td>2015</td>
<td>2017</td>
<td>UNESCO Institute for Statistics</td>
</tr>
</tbody>
</table>
ABOUT THE GLOBAL INNOVATION INDEX

The Global Innovation Index (GII) is co-published by Cornell University, INSEAD, and the World Intellectual Property Organization (WIPO), a specialized agency of the United Nations. In 2020, the GII presents its 13th edition devoted to the theme *Who Will Finance Innovation?*

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.