The Republic of Moldova ranks 64th 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 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 2021 is between ranks 58 and 66.

### Rankings for the Republic of Moldova (2019–2021)

<table>
<thead>
<tr>
<th>Year</th>
<th>GII</th>
<th>Innovation inputs</th>
<th>Innovation outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>64</td>
<td>80</td>
<td>54</td>
</tr>
<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>
</tbody>
</table>

- The Republic of Moldova performs better in innovation outputs than innovation inputs in 2021.
- This year the Republic of Moldova ranks 80th in innovation inputs, lower than last year but higher than 2019.
- As for innovation outputs, The Republic of Moldova ranks 54th. This position is lower than both 2020 and 2019.

Moldova ranks 6th among the 34 lower middle-income group economies.

Moldova ranks 37th 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

- **Innovation leader**
- **Performing at expectations for level of development**
- **Performing above 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.

Innovation input to output performance

\[\text{Input score} \quad \text{Output score} \]

Income: High, Upper middle, Lower middle, Low, Fitted line
BENCHMARKING AGAINST OTHER LOWER MIDDLE-INCOME GROUP ECONOMIES AND EUROPE

The seven GII pillar scores for the Republic of Moldova

Lower middle-income group economies

The Republic of Moldova performs above the lower middle-income group average in all GII pillars.

Europe

The Republic of Moldova performs below the regional average in all GII pillars.
OVERVIEW OF RANKINGS IN THE SEVEN GII 2021 AREAS

The Republic of Moldova performs best in Creative outputs and its weakest performance is in Business sophistication.

The seven GII pillar ranks for the Republic of Moldova

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 the Republic of Moldova in the GII 2021.

**Strengths and weaknesses for the Republic of Moldova**

<table>
<thead>
<tr>
<th>Code</th>
<th>Indicator name</th>
<th>Rank</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>2.3.3</td>
<td>Global corporate R&amp;D investors, top 3, mn US$</td>
<td>41</td>
</tr>
<tr>
<td>2.1.1</td>
<td>Expenditure on education, % GDP</td>
<td>13</td>
<td>2.3.4</td>
<td>QS university ranking, top 3</td>
<td>74</td>
</tr>
<tr>
<td>2.1.2</td>
<td>Government funding/pupil, secondary, % GDP/cap</td>
<td>18</td>
<td>3.2.2</td>
<td>Logistics performance</td>
<td>108</td>
</tr>
<tr>
<td>2.1.5</td>
<td>Pupil-teacher ratio, secondary</td>
<td>31</td>
<td>3.3.1</td>
<td>GDP/unit of energy use</td>
<td>107</td>
</tr>
<tr>
<td>6.1.1</td>
<td>Patents by origin/bn PPP$ GDP</td>
<td>31</td>
<td>4.3.3</td>
<td>Domestic market scale, bn PPP$</td>
<td>116</td>
</tr>
<tr>
<td>6.1.3</td>
<td>Utility models by origin/bn PPP$ GDP</td>
<td>1</td>
<td>5.1.3</td>
<td>GERD performed by business, % GDP</td>
<td>76</td>
</tr>
<tr>
<td>6.3.4</td>
<td>ICT services exports, % total trade</td>
<td>15</td>
<td>5.2</td>
<td>Innovation linkages</td>
<td>119</td>
</tr>
<tr>
<td>7.1.1</td>
<td>Trademarks by origin/bn PPP$ GDP</td>
<td>14</td>
<td>5.2.1</td>
<td>University-industry R&amp;D collaboration</td>
<td>116</td>
</tr>
<tr>
<td>7.1.3</td>
<td>Industrial designs by origin/bn PPP$ GDP</td>
<td>9</td>
<td>5.2.2</td>
<td>State of cluster development and depth</td>
<td>126</td>
</tr>
<tr>
<td>7.3.4</td>
<td>Mobile app creation/bn PPP$ GDP</td>
<td>20</td>
<td>7.1.2</td>
<td>Global brand value, top 5,000, % GDP</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7.2.2</td>
<td>National feature films/mn pop. 15–69</td>
<td>101</td>
</tr>
</tbody>
</table>
## Republic of Moldova

<table>
<thead>
<tr>
<th>Output rank</th>
<th>Input rank</th>
<th>Income</th>
<th>Region</th>
<th>Population (mn)</th>
<th>GDP, PPP$ (bn)</th>
<th>GDP per capita, PPP$</th>
<th>GII 2021 rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>54</td>
<td>80</td>
<td>EUR</td>
<td>4.0</td>
<td>34.9</td>
<td>13,253</td>
<td>59</td>
<td>64</td>
</tr>
</tbody>
</table>

### Institutions

<table>
<thead>
<tr>
<th>Score/ Value Rank</th>
<th>59.8 81</th>
</tr>
</thead>
</table>

#### 1.1 Political environment

- Political and operational stability
- Government effectiveness

#### 1.2 Regulatory environment

- Regulatory quality
- Rule of law
- Cost of redundancy dismissal

#### 1.3 Business environment

- Ease of starting a business
- Ease of resolving insolvency

### Human capital and research

<table>
<thead>
<tr>
<th>Score/ Value Rank</th>
<th>28.8 77</th>
</tr>
</thead>
</table>

#### 2.1 Education

- Expenditure on education, % GDP
- Government funding/pupil, secondary, % GDP/cap
- School life expectancy, years
- PISA scales in reading, maths and science
- Pupil-teacher ratio, secondary

#### 2.2 Tertiary education

- Tertiary enrolment, % gross
- Graduates in science and engineering, %
- Ease of protecting minority investors

#### 2.3 Research and development (R&D)

- Market capitalization, % GDP
- Venture capital investors, deals/bn PPP$ GDP
- Global corporate R&D investors, top 3, mn US$

### Infrastructure

<table>
<thead>
<tr>
<th>Score/ Value Rank</th>
<th>36.5 82</th>
</tr>
</thead>
</table>

#### 3.1 Information and communication technologies (ICTs)

- ICT access
- ICT use
- Government’s online service
- E-participation

#### 3.2 General infrastructure

- Electricity output, GWh/mn pop.
- Logistics performance
- Electricity output, GWh/mn pop.
- Pupil-teacher ratio, secondary

#### 3.3 Ecological sustainability

- GDP/Unit of energy use
- Environmental performance
- ISO 14001 environmental certificates/bn PPP$ GDP

### Market sophistication

<table>
<thead>
<tr>
<th>Score/ Value Rank</th>
<th>44.9 74</th>
</tr>
</thead>
</table>

#### 4.1 Credit

- Ease of getting credit
- Domestic credit to private sector, % GDP
- Microfinance gross loans, % GDP

#### 4.2 Investment

- Ease of protecting minority investors
- Market capitalization, % GDP
- Venture capital investors, deals/bn PPP$ GDP
- Venture capital recipients, deals/bn PPP$ GDP

#### 4.3 Trade, diversification, and market scale

- Trade, diversification, and market scale
- Applied tariff rate, weighted avg., %
- Domestic industry diversification
- Domestic market scale, bn PPP$ GDP

### Business sophistication

<table>
<thead>
<tr>
<th>Score/ Value Rank</th>
<th>21.7 87</th>
</tr>
</thead>
</table>

#### 5.1 Knowledge workers

- Knowledge-intensive employment, %
- Firms offering formal training, %
- GERD performed by business, % GDP
- Females employed w/advanced degrees, %

#### 5.2 Innovation linkages

- University-industry R&D collaboration
- State of cluster development and depth
- GERD financed by abroad, % GDP
- Joint venture/strategic alliance deals/bn PPP$ GDP

#### 5.3 Knowledge absorption

- Intellectual property payments, % total trade
- High-tech imports, % total trade
- ICT services imports, % total trade
- FDI net inflows, % GDP

#### 5.4 Knowledge diffusion

- International property receipts, % total trade
- Production and export complexity
- High-tech exports, % total trade
- ICT services exports, % total trade

#### 5.5 Creative outputs

- Intangible assets
- Trademarks by origin/bn PPP$ GDP
- Utility models by origin/bn PPP$ GDP
- Scientific and technical articles/bn PPP$ GDP
- Citable documents H-index

#### 5.6 Creative goods and services

- Cultural and creative services exports, % total trade
- National feature films/mn pop. 15–69
- Entertainment and media market/th pop. 15–69
- Printing and other media, % manufacturing

### 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.

The Global Innovation Index 2021

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DATA AVAILABILITY

The following tables list data that are either missing or outdated for the Republic of Moldova.

### Missing data for the Republic of Moldova

<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>4.2.2</td>
<td>Market capitalization, % GDP</td>
<td>n/a</td>
<td>2019</td>
<td>World Federation of Exchanges</td>
</tr>
<tr>
<td>4.2.3</td>
<td>Venture capital investors, deals/bn PPP$ GDP</td>
<td>n/a</td>
<td>2020</td>
<td>Refinitiv Eikon</td>
</tr>
<tr>
<td>5.2.4</td>
<td>Joint venture/strategic alliance deals/bn PPP$ GDP</td>
<td>n/a</td>
<td>2020</td>
<td>Refinitiv</td>
</tr>
<tr>
<td>7.2.3</td>
<td>Entertainment and media market/th pop. 15–69</td>
<td>n/a</td>
<td>2020</td>
<td>PwC</td>
</tr>
</tbody>
</table>

### Outdated data for the Republic of Moldova

<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>2.3.1</td>
<td>Researchers, FTE/mn pop.</td>
<td>2018</td>
<td>2019</td>
<td>UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators</td>
</tr>
<tr>
<td>2.3.2</td>
<td>Gross expenditure on R&amp;D, % GDP</td>
<td>2018</td>
<td>2019</td>
<td>UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators</td>
</tr>
<tr>
<td>4.3.1</td>
<td>Applied tariff rate, weighted avg., %</td>
<td>2016</td>
<td>2019</td>
<td>World Bank</td>
</tr>
<tr>
<td>5.1.3</td>
<td>GERD performed by business, % GDP</td>
<td>2018</td>
<td>2019</td>
<td>UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators</td>
</tr>
<tr>
<td>5.2.1</td>
<td>University-industry R&amp;D collaboration</td>
<td>2019</td>
<td>2020</td>
<td>World Economic Forum</td>
</tr>
<tr>
<td>5.2.2</td>
<td>State of cluster development and depth</td>
<td>2019</td>
<td>2020</td>
<td>World Economic Forum</td>
</tr>
<tr>
<td>5.3.5</td>
<td>Research talent, % in businesses</td>
<td>2018</td>
<td>2019</td>
<td>UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators</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 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.