SLOVENIA

32nd Slovenia ranks 32nd 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 Slovenia 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 Slovenia in the GII 2021 is between ranks 31 and 32.

### Rankings for Slovenia (2019–2021)

<table>
<thead>
<tr>
<th></th>
<th>GII</th>
<th>Innovation inputs</th>
<th>Innovation outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>32</td>
<td>27</td>
<td>36</td>
</tr>
<tr>
<td>2020</td>
<td>32</td>
<td>29</td>
<td>39</td>
</tr>
<tr>
<td>2019</td>
<td>31</td>
<td>33</td>
<td>30</td>
</tr>
</tbody>
</table>

- Slovenia performs better in innovation inputs than innovation outputs in 2021.
- This year Slovenia ranks 27th in innovation inputs, higher than both 2020 and 2019.
- As for innovation outputs, Slovenia ranks 36th. This position is higher than last year but lower than 2019.

31st Slovenia ranks 31st among the 51 high-income group economies.

21st Slovenia ranks 21st 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, Slovenia’s performance is at expectations for its 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.

Slovenia produces less innovation outputs relative to its level of innovation investments.

Innovation input to output performance
High-income group economies

Slovenia performs above the high-income group average in four pillars, namely: Institutions; Human capital and research; Infrastructure; and, Business sophistication.

Europe

Slovenia performs above the regional average in four pillars, namely: Institutions; Human capital and research; Infrastructure; and, Business sophistication.
OVERVIEW OF RANKINGS IN THE SEVEN GII 2021 AREAS

Slovenia performs best in Institutions and its weakest performance is in Market sophistication.

The seven GII pillar ranks for Slovenia

<table>
<thead>
<tr>
<th>Area</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutions</td>
<td>20</td>
</tr>
<tr>
<td>Business sophistication</td>
<td>27</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>27</td>
</tr>
<tr>
<td>Human capital and research</td>
<td>28</td>
</tr>
<tr>
<td>Knowledge and technology outputs</td>
<td>32</td>
</tr>
<tr>
<td>Global Innovation Index 2021</td>
<td>32</td>
</tr>
<tr>
<td>Creative outputs</td>
<td>38</td>
</tr>
<tr>
<td>Market sophistication</td>
<td>71</td>
</tr>
</tbody>
</table>

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 Slovenia in the GII 2021.

### Strengths and weaknesses for Slovenia

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Code</th>
<th>Indicator name</th>
<th>Rank</th>
<th>Weaknesses</th>
<th>Code</th>
<th>Indicator name</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3</td>
<td>Business environment</td>
<td>7</td>
<td>4.1</td>
<td>Credit</td>
<td>102</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3.2</td>
<td>Ease of resolving insolvency</td>
<td>8</td>
<td>4.1.1</td>
<td>Ease of getting credit</td>
<td>101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.3.2</td>
<td>Domestic industry diversification</td>
<td>10</td>
<td>4.1.2</td>
<td>Domestic credit to private sector, % GDP</td>
<td>79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.1.4</td>
<td>GERD financed by business, %</td>
<td>11</td>
<td>4.2.2</td>
<td>Market capitalization, % GDP</td>
<td>65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2.3</td>
<td>GERD financed by abroad, % GDP</td>
<td>12</td>
<td>4.3.3</td>
<td>Domestic market scale, bn PPP$</td>
<td>88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.3.5</td>
<td>Research talent, % in businesses</td>
<td>11</td>
<td>5.2.2</td>
<td>State of cluster development and depth</td>
<td>74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.1.4</td>
<td>Scientific and technical articles/bn PPP$ GDP</td>
<td>4</td>
<td>5.3.2</td>
<td>High-tech imports, % total trade</td>
<td>86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2.4</td>
<td>ISO 9001 quality certificates/bn PPP$ GDP</td>
<td>12</td>
<td>6.1.3</td>
<td>Utility models by origin/bn PPP$ GDP</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.3.2</td>
<td>Production and export complexity</td>
<td>10</td>
<td>6.2.1</td>
<td>Labor productivity growth, %</td>
<td>81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.2.2</td>
<td>National feature films/mn pop. 15–69</td>
<td>9</td>
<td>6.2.3</td>
<td>Software spending, % GDP</td>
<td>89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.3.4</td>
<td>Mobile app creation/bn PPP$ GDP</td>
<td>12</td>
<td>7.1.2</td>
<td>Global brand value, top 5,000, % GDP</td>
<td>66</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Slovenia

### Output rank 36  Input rank 27  Income High

### Region

<table>
<thead>
<tr>
<th>Population (mn)</th>
<th>GDP, PPP$ (bn)</th>
<th>GDP per capita, PPP$</th>
<th>GII 2020 rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUR 2.1</td>
<td>79.7</td>
<td>38,506</td>
<td>32</td>
</tr>
</tbody>
</table>

### Institutions

<table>
<thead>
<tr>
<th>Score/Value Rank</th>
<th>GII 2021 rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>82.9 20</td>
<td></td>
</tr>
</tbody>
</table>

#### 1.1 Political environment
- 1.1.1 Political and operational stability* 76.0 31
- 1.1.2 Government effectiveness* 78.6 34

#### 1.2 Regulatory environment
- 1.2.1 Regulatory quality* 74.9 33
- 1.2.2 Rule of law 76.2 25
- 1.2.3 Cost of redundancy dismissal 10.7 34

#### 1.3 Business environment
- 1.3.1 Ease of starting a business* 93.0 39
- 1.3.2 Ease of resolving insolvency* 84.4 8

### Human capital and research

#### 2.1 Education
- 2.1.1 Expenditure on education, % GDP 4.8 48
- 2.1.2 Government funding/pupil, secondary, % GDP/cap 22.8 29
- 2.1.3 School life expectancy, years 176 15
- 2.1.4 PISA scales in reading, maths and science 503.7 11
- 2.1.5 Pupil-teacher ratio, secondary 15.1 72

#### 2.2 Tertiary education
- 2.2.1 Tertiary enrolment, % gross 77.1 24
- 2.2.2 Graduates in science and engineering, % 27.2 27
- 2.2.3 Tertiary inbound mobility, % 4.5 53

#### 2.3 Research and development (R&D)
- 2.3.1 Researchers, FTE/mn pop. 5,052.3 17
- 2.3.2 Gross expenditure on R&D, % GDP 2.0 17

#### 2.4 Global corporate R&D investments, top 3, mn US$
- 51.9 27

#### 2.4.3 QS university ranking, top 3* 11.3 63

### Infrastructure

#### 3.1 Information and communication technologies (ICTs)
- 3.1.1 ICT access* 84.8 20
- 3.1.2 ICT user 72.5 40
- 3.1.3 Government’s online service* 85.3 24
- 3.1.4 E-participation* 85.7 29

#### 3.2 General infrastructure
- 3.2.1 Electricity output, GWh/mn pop. 7,605.7 27
- 3.2.2 Logistics performance* 58.9 34
- 3.2.3 Global corporate R&D investors, top 3, mn US$ 51.9 27
- 3.2.4 ISO 14001 environmental certificates/bn PPP$ GDP 11.1 57
- 3.2.5 QS university ranking, top 3* 11.1 57

### Market sophistication

#### 4.1 Credit
- 4.1.1 Ease of getting credit* 45.0 101
- 4.1.2 Domestic credit to private sector, % GDP 42.5 79
- 4.1.3 Microfinance gross loans, % GDP n/a n/a

#### 4.2 Investment
- 4.2.1 Ease of protecting minority investors* 78.0 18
- 4.2.2 Market capitalization, % GDP 13.7 65

#### 4.3 Trade, diversification, and market scale
- 4.3.1 Applied tariff rate, weighted avg., % 1.8 25
- 4.3.2 Domestic industry diversification 98.2 10

#### 4.3.3 Domestic market scale, bn PPP$ 78.7 88

### Business sophistication

<table>
<thead>
<tr>
<th>Score/Value Rank</th>
<th>GII 2021 rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>42.8 27</td>
<td></td>
</tr>
</tbody>
</table>

#### 5.1 Knowledge workers
- 5.1.1 Knowledge-intensive employment, % 43.2 22

#### 5.2 Innovation linkages
- 5.2.1 University-industry R&D cooperation* 49.6 40
- 5.2.2 State of cluster development and depth* 45.4 74

#### 5.3 Knowledge absorption
- 5.3.1 Intellectual property payments, % total trade 6.6 86

#### 5.4 ICT services imports, % total trade 1.5 50

#### 5.4.3 FDNI inflows, % GDP 2.8 56

#### 5.5 Research talent, % in businesses 60.7 11

### Knowledge and technology outputs

<table>
<thead>
<tr>
<th>Score/Value Rank</th>
<th>GII 2021 rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>33.0 32</td>
<td></td>
</tr>
</tbody>
</table>

#### 6.1 Knowledge creation
- 6.1.1 Patents by origin/bn PPP$ GDP 4.4 21

#### 6.2 Knowledge impact
- 6.2.1 Labor productivity growth, % 0.9 66

#### 6.3.2 Business sophistication, % total trade 0.4 35

#### 6.4.3 ICT services exports, % total trade 1.7 66

### Creative outputs

#### 7.1 Intangible assets
- 7.1.1 Trademarks by origin/bn PPP$ GDP 68.4 26

#### 7.2 Creative goods and services
- 7.2.1 Cultural and creative services exports, % total trade 0.9 34

#### 7.2.2 National feature films/mn pop. 15–69 4.1 19

#### 7.2.3 Entertainment and media market/th pop. 15–69 0.9 n/a

#### 7.2.5 Creative goods exports, % total trade 0.8 49

#### 7.3 Online creativity
- 7.3.1 Generic top-level domains (TLDs)/th pop. 15–69 0.8 29

#### 7.3.2 Country-code TLDs/th pop. 15–69 28.5 24

#### 7.3.3 Wikipedia edits/mn pop. 15–69 74.9 23

#### 7.3.4 Mobile app creation/bn PPP$ GDP 36.7 12

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**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 Slovenia.

### Missing data for Slovenia

<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>4.1.3</td>
<td>Microfinance gross loans, % GDP</td>
<td>n/a</td>
<td>2018</td>
<td>Microfinance Information Exchange</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>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 Slovenia

<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>2.1.5</td>
<td>Pupil-teacher ratio, secondary</td>
<td>2018</td>
<td>2019</td>
<td>UNESCO Institute for Statistics</td>
</tr>
<tr>
<td>6.1.1</td>
<td>Patents by origin/bn PPP$ GDP</td>
<td>2018</td>
<td>2019</td>
<td>World Intellectual Property Organization</td>
</tr>
<tr>
<td>6.1.3</td>
<td>Utility models by origin/bn PPP$ GDP</td>
<td>2010</td>
<td>2019</td>
<td>World Intellectual Property Organization</td>
</tr>
<tr>
<td>7.1.1</td>
<td>Trademarks by origin/bn PPP$ GDP</td>
<td>2018</td>
<td>2019</td>
<td>World Intellectual Property Organization</td>
</tr>
<tr>
<td>7.1.3</td>
<td>Industrial designs by origin/bn PPP$ GDP</td>
<td>2018</td>
<td>2019</td>
<td>World Intellectual Property Organization</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.