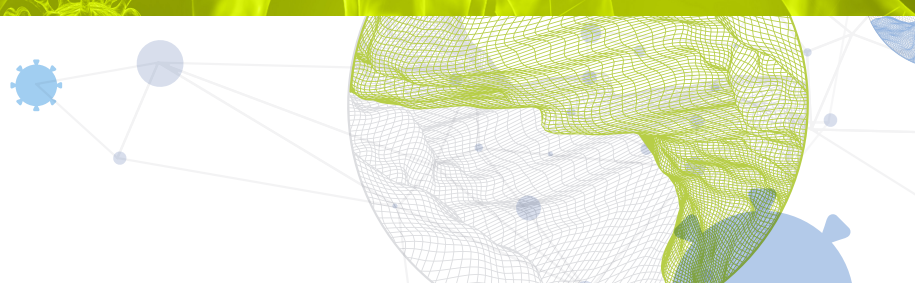




# Global Innovation Index 2021



## SRI LANKA

**95th**

Sri Lanka ranks 95th 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 Sri Lanka 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 Sri Lanka in the GII 2021 is between ranks 84 and 97.

### Rankings for Sri Lanka (2019–2021)

|      | GII | Innovation inputs | Innovation outputs |
|------|-----|-------------------|--------------------|
| 2021 | 95  | 103               | 85                 |
| 2020 | 101 | 107               | 83                 |
| 2019 | 89  | 94                | 77                 |

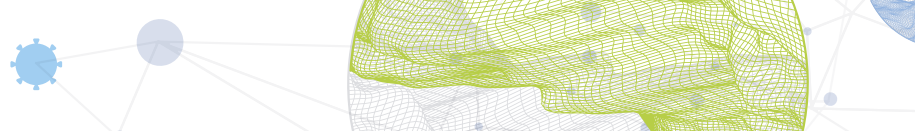
- Sri Lanka performs better in innovation outputs than innovation inputs in 2021.
- This year Sri Lanka ranks 103rd in innovation inputs, higher than last year but lower than 2019.
- As for innovation outputs, Sri Lanka ranks 85th. This position is lower than both 2020 and 2019.

**14th**

Sri Lanka ranks 14th among the 34 lower middle-income group economies.

**5th**

Sri Lanka ranks 5th among the 10 economies in Central and Southern Asia.

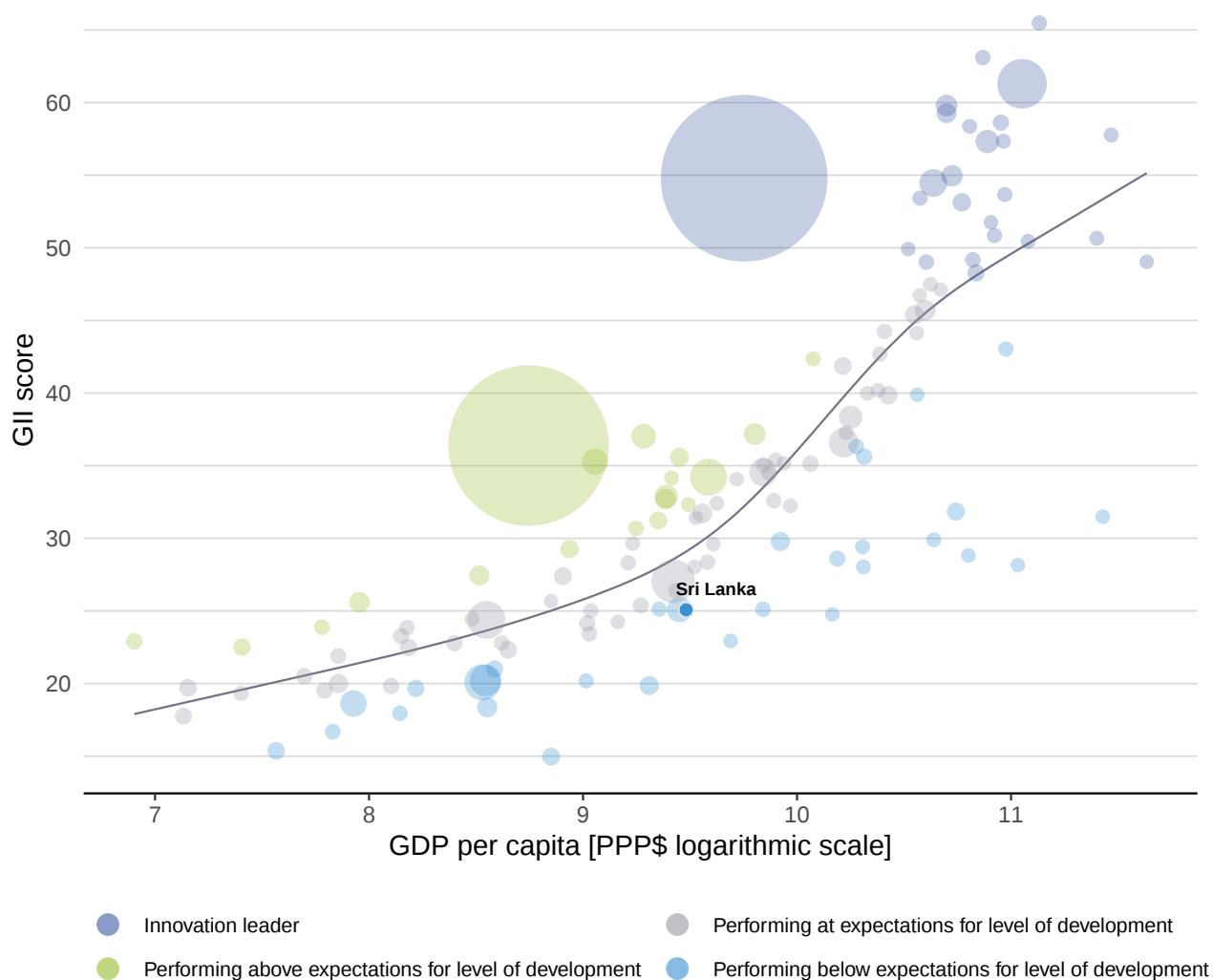


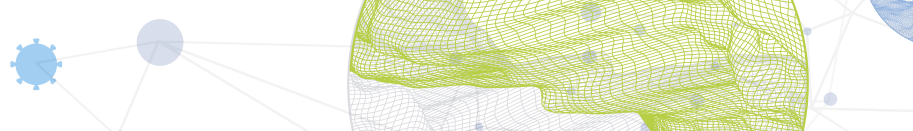
## EXPECTED VS. OBSERVED INNOVATION PERFORMANCE

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, Sri Lanka's performance is below expectations for its level of development.

### The positive relationship between innovation and development



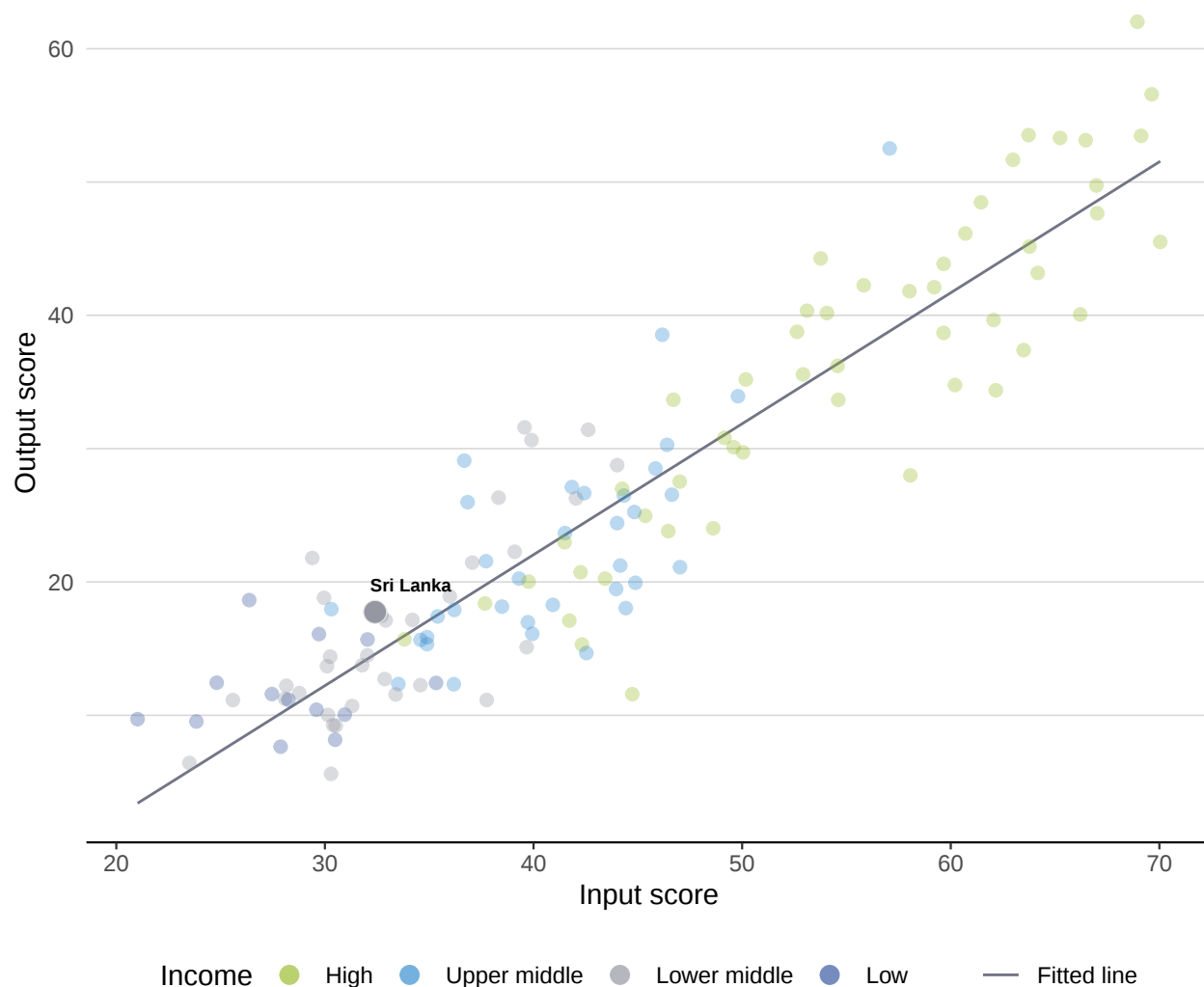


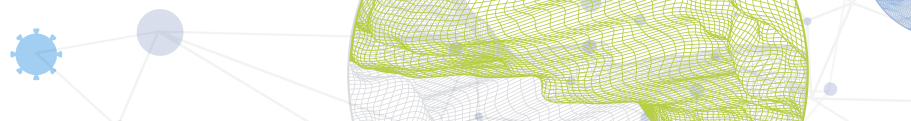
## EFFECTIVELY TRANSLATING INNOVATION INVESTMENTS INTO INNOVATION OUTPUTS

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.

Sri Lanka produces more innovation outputs relative to its level of innovation investments.

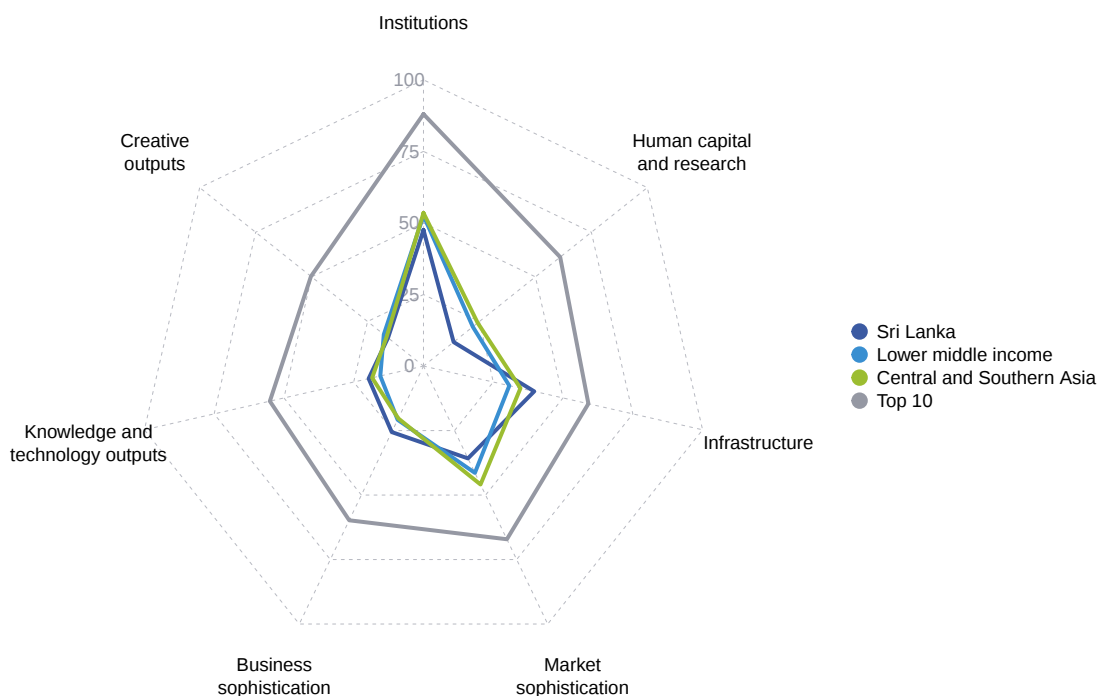
### Innovation input to output performance





## BENCHMARKING AGAINST OTHER LOWER MIDDLE-INCOME GROUP ECONOMIES AND CENTRAL AND SOUTHERN ASIA

### The seven GII pillar scores for Sri Lanka

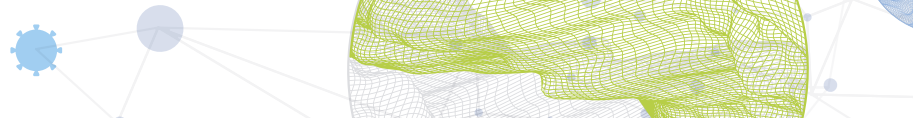


### Lower middle-income group economies

Sri Lanka performs above the lower middle-income group average in three pillars, namely: Infrastructure; Business sophistication; and, Knowledge and technology outputs.

### Central and Southern Asia

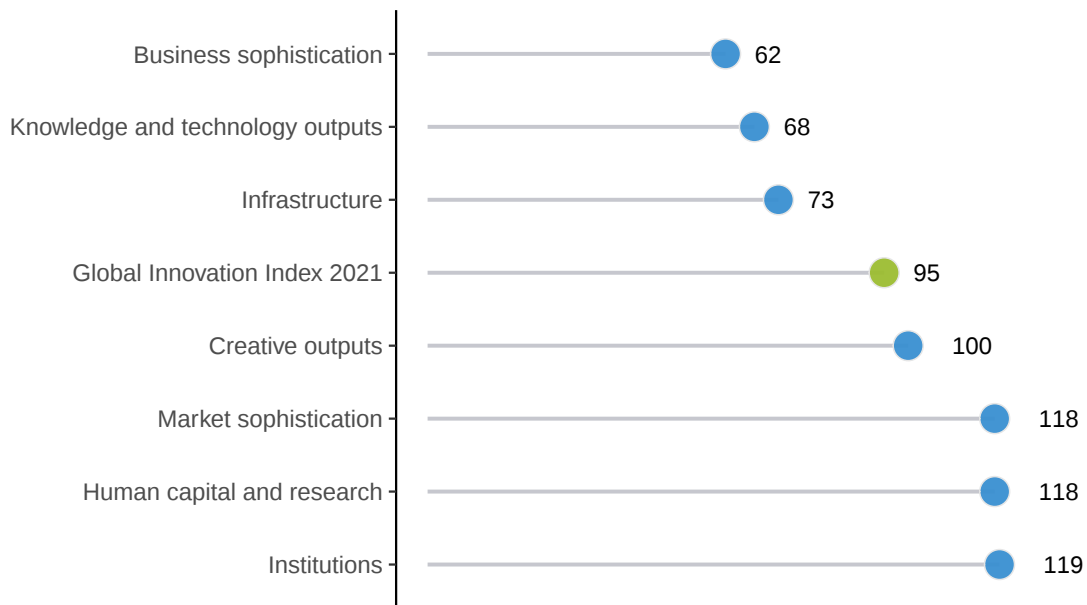
Sri Lanka performs above the regional average in three pillars, namely: Infrastructure; Business sophistication; and, Knowledge and technology outputs.



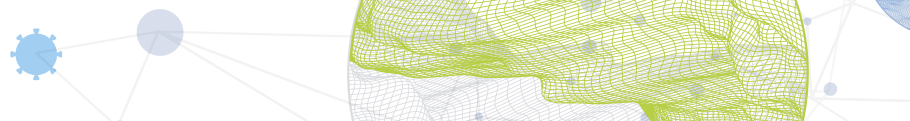
## OVERVIEW OF RANKINGS IN THE SEVEN GII 2021 AREAS

Sri Lanka performs best in Business sophistication and its weakest performance is in Institutions.

### The seven GII pillar ranks for Sri Lanka



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 Sri Lanka in the GII 2021.

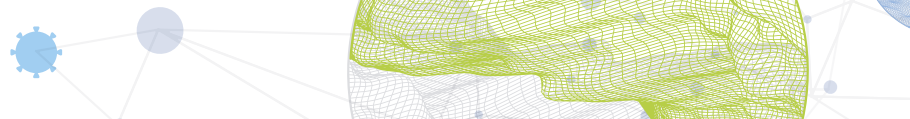
### Strengths and weaknesses for Sri Lanka

| Strengths |                                                     |      | Weaknesses |                                                |      |
|-----------|-----------------------------------------------------|------|------------|------------------------------------------------|------|
| Code      | Indicator name                                      | Rank | Code       | Indicator name                                 | Rank |
| 3.3       | Ecological sustainability                           | 37   | 1.2        | Regulatory environment                         | 130  |
| 3.3.1     | GDP/unit of energy use                              | 4    | 1.2.3      | Cost of redundancy dismissal                   | 130  |
| 4.2.1     | Ease of protecting minority investors               | 27   | 2.1        | Education                                      | 114  |
| 5.2.1     | University-industry R&D collaboration               | 44   | 2.1.1      | Expenditure on education, % GDP                | 112  |
| 5.2.2     | State of cluster development and depth              | 44   | 2.1.2      | Government funding/pupil, secondary, % GDP/cap | 99   |
| 5.2.4     | Joint venture/strategic alliance deals/bn PPP\$ GDP | 28   | 2.2.3      | Tertiary inbound mobility, %                   | 97   |
| 5.3.3     | ICT services imports, % total trade                 | 26   | 2.3.3      | Global corporate R&D investors, top 3, mn US\$ | 41   |
| 6.2.1     | Labor productivity growth, %                        | 46   | 2.3.4      | QS university ranking, top 3                   | 74   |
| 6.2.3     | Software spending, % GDP                            | 22   | 4.1        | Credit                                         | 116  |
| 6.3       | Knowledge diffusion                                 | 46   | 4.1.1      | Ease of getting credit                         | 113  |
| 6.3.4     | ICT services exports, % total trade                 | 16   | 4.2.3      | Venture capital investors, deals/bn PPP\$ GDP  | 78   |
| 7.2.4     | Printing and other media, % manufacturing           | 11   | 4.3.1      | Applied tariff rate, weighted avg., %          | 127  |
|           |                                                     |      | 6.1.4      | Scientific and technical articles/bn PPP\$ GDP | 114  |

| Output rank | Input rank | Income       | Region | Population (mn) | GDP, PPP\$ (bn) | GDP per capita, PPP\$ | GII 2020 rank |
|-------------|------------|--------------|--------|-----------------|-----------------|-----------------------|---------------|
| 85          | 103        | Lower middle | CSA    | 21.4            | 287.7           | 13,114                | 101           |

|                                                                                                                     | Score/<br>Value | Rank |                                                                                                                           | Score/<br>Value | Rank |
|---------------------------------------------------------------------------------------------------------------------|-----------------|------|---------------------------------------------------------------------------------------------------------------------------|-----------------|------|
|  <b>Institutions</b>               | 47.5            | 119  |  <b>Business sophistication</b>          | 25.6            | 62   |
| <b>1.1 Political environment</b>                                                                                    | 54.7            | 79   | <b>5.1 Knowledge workers</b>                                                                                              | 23.7            | 87   |
| 1.1.1 Political and operational stability*                                                                          | 67.9            | 71   | 5.1.1 Knowledge-intensive employment, %                                                                                   | 23.0            | 68   |
| 1.1.2 Government effectiveness*                                                                                     | 48.1            | 81   | 5.1.2 Firms offering formal training, %                                                                                   | 18.4            | 83   |
| <b>1.2 Regulatory environment</b>                                                                                   | 21.3            | 130  | 5.1.3 GERD performed by business, % GDP                                                                                   | 0.1             | 73   |
| 1.2.1 Regulatory quality*                                                                                           | 38.7            | 83   | 5.1.4 GERD financed by business, %                                                                                        | 40.3            | 44   |
| 1.2.2 Rule of law*                                                                                                  | 46.4            | 63   | 5.1.5 Females employed w/advanced degrees, %                                                                              | 3.2             | 100  |
| 1.2.3 Cost of redundancy dismissal                                                                                  | 58.5            | 130  | <b>5.2 Innovation linkages</b>                                                                                            | 21.3            | 62   |
| <b>1.3 Business environment</b>                                                                                     | 66.6            | 79   | 5.2.1 University-industry R&D collaboration†                                                                              | 48.7            | 44   |
| 1.3.1 Ease of starting a business*                                                                                  | 88.2            | 68   | 5.2.2 State of cluster development and depth†                                                                             | 50.4            | 44   |
| 1.3.2 Ease of resolving insolvency*                                                                                 | 45.0            | 85   | 5.2.3 GERD financed by abroad, % GDP                                                                                      | 0.0             | 79   |
|                                                                                                                     |                 |      | 5.2.4 Joint venture/strategic alliance deals/bn PPP\$ GDP                                                                 | 0.1             | 28   |
|                                                                                                                     |                 |      | 5.2.5 Patent families/bn PPP\$ GDP                                                                                        | 0.0             | 73   |
|  <b>Human capital and research</b> | 13.5            | 118  | <b>5.3 Knowledge absorption</b>                                                                                           | 31.7            | 53   |
| <b>2.1 Education</b>                                                                                                | 29.6            | 114  | 5.3.1 Intellectual property payments, % total trade                                                                       | n/a             | n/a  |
| 2.1.1 Expenditure on education, % GDP                                                                               | 2.1             | 112  | 5.3.2 High-tech imports, % total trade                                                                                    | 7.7             | 64   |
| 2.1.2 Government funding/pupil, secondary, % GDP/cap                                                                | 6.7             | 99   | 5.3.3 ICT services imports, % total trade                                                                                 | 2.3             | 26   |
| 2.1.3 School life expectancy, years                                                                                 | 14.1            | 70   | 5.3.4 FDI net inflows, % GDP                                                                                              | 1.4             | 95   |
| 2.1.4 PISA scales in reading, maths and science                                                                     | n/a             | n/a  | 5.3.5 Research talent, % in businesses                                                                                    | 20.0            | 54   |
| 2.1.5 Pupil-teacher ratio, secondary                                                                                | 17.5            | 85   |                                                                                                                           |                 |      |
| <b>2.2 Tertiary education</b>                                                                                       | 9.9             | 113  |  <b>Knowledge and technology outputs</b> | 19.7            | 68   |
| 2.2.1 Tertiary enrolment, % gross                                                                                   | 21.1            | 97   | <b>6.1 Knowledge creation</b>                                                                                             | 7.7             | 90   |
| 2.2.2 Graduates in science and engineering, %                                                                       | n/a             | n/a  | 6.1.1 Patents by origin/bn PPP\$ GDP                                                                                      | 1.2             | 59   |
| 2.2.3 Tertiary inbound mobility, %                                                                                  | 0.5             | 97   | 6.1.2 PCT patents by origin/bn PPP\$ GDP                                                                                  | 0.1             | 69   |
| <b>2.3 Research and development (R&amp;D)</b>                                                                       | 0.9             | 106  | 6.1.3 Utility models by origin/bn PPP\$ GDP                                                                               | n/a             | n/a  |
| 2.3.1 Researchers, FTE/mn pop.                                                                                      | 106.4           | 86   | 6.1.4 Scientific and technical articles/bn PPP\$ GDP                                                                      | 4.7             | 114  |
| 2.3.2 Gross expenditure on R&D, % GDP                                                                               | 0.1             | 100  | 6.1.5 Citable documents H-index                                                                                           | 10.6            | 72   |
| 2.3.3 Global corporate R&D investors, top 3, mn US\$                                                                | 0.0             | 41   | <b>6.2 Knowledge impact</b>                                                                                               | 26.3            | 79   |
| 2.3.4 QS university ranking, top 3*                                                                                 | 0.0             | 74   | 6.2.1 Labor productivity growth, %                                                                                        | 1.0             | 46   |
|                                                                                                                     |                 |      | 6.2.2 New businesses/th pop. 15–64                                                                                        | 0.7             | 88   |
|  <b>Infrastructure</b>           | 39.7            | 73   | 6.2.3 Software spending, % GDP                                                                                            | 0.4             | 22   |
| <b>3.1 Information and communication technologies (ICTs)</b>                                                        | 57.4            | 88   | 6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP                                                                          | 4.2             | 62   |
| 3.1.1 ICT access*                                                                                                   | 49.1            | 92   | 6.2.5 High-tech manufacturing, %                                                                                          | 7.7             | 95   |
| 3.1.2 ICT use*                                                                                                      | 37.4            | 100  | <b>6.3 Knowledge diffusion</b>                                                                                            | 25.0            | 46   |
| 3.1.3 Government's online service*                                                                                  | 71.8            | 63   | 6.3.1 Intellectual property receipts, % total trade                                                                       | n/a             | n/a  |
| 3.1.4 E-participation*                                                                                              | 71.4            | 66   | 6.3.2 Production and export complexity                                                                                    | 35.6            | 77   |
| <b>3.2 General infrastructure</b>                                                                                   | 22.1            | 96   | 6.3.3 High-tech exports, % total trade                                                                                    | 0.9             | 75   |
| 3.2.1 Electricity output, GWh/mn pop.                                                                               | 711.5           | 103  | 6.3.4 ICT services exports, % total trade                                                                                 | 4.8             | 16   |
| 3.2.2 Logistics performance*                                                                                        | 25.6            | 90   |                                                                                                                           |                 |      |
| 3.2.3 Gross capital formation, % GDP                                                                                | 24.4            | 53   |  <b>Creative outputs</b>               | 15.8            | 100  |
| <b>3.3 Ecological sustainability</b>                                                                                | 39.5            | 37   | <b>7.1 Intangible assets</b>                                                                                              | 21.1            | 97   |
| 3.3.1 GDP/unit of energy use                                                                                        | 23.7            | 4    | 7.1.1 Trademarks by origin/bn PPP\$ GDP                                                                                   | 22.5            | 88   |
| 3.3.2 Environmental performance*                                                                                    | 39.0            | 90   | 7.1.2 Global brand value, top 5,000, % GDP                                                                                | 15.7            | 53   |
| 3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP                                                             | 1.4             | 59   | 7.1.3 Industrial designs by origin/bn PPP\$ GDP                                                                           | 1.6             | 54   |
|                                                                                                                     |                 |      | 7.1.4 ICTs and organizational model creation†                                                                             | 47.5            | 91   |
|  <b>Market sophistication</b>    | 35.8            | 118  | <b>7.2 Creative goods and services</b>                                                                                    | 13.9            | [67] |
| <b>4.1 Credit</b>                                                                                                   | 25.5            | 116  | 7.2.1 Cultural and creative services exports, % total trade                                                               | n/a             | n/a  |
| 4.1.1 Ease of getting credit*                                                                                       | 40.0            | 113  | 7.2.2 National feature films/mn pop. 15–69                                                                                | 1.0             | 85   |
| 4.1.2 Domestic credit to private sector, % GDP                                                                      | 49.8            | 70   | 7.2.3 Entertainment and media market/th pop. 15–69                                                                        | n/a             | n/a  |
| 4.1.3 Microfinance gross loans, % GDP                                                                               | 0.5             | 35   | 7.2.4 Printing and other media, % manufacturing                                                                           | 2.3             | 11   |
| <b>4.2 Investment</b>                                                                                               | 20.7            | 109  | 7.2.5 Creative goods exports, % total trade                                                                               | 0.4             | 67   |
| 4.2.1 Ease of protecting minority investors*                                                                        | 72.0            | 27   | <b>7.3 Online creativity</b>                                                                                              | 7.4             | 112  |
| 4.2.2 Market capitalization, % GDP                                                                                  | 19.3            | 60   | 7.3.1 Generic top-level domains (TLDs)/th pop. 15–69                                                                      | 0.7             | 101  |
| 4.2.3 Venture capital investors, deals/bn PPP\$ GDP                                                                 | 0.0             | 78   | 7.3.2 Country-code TLDs/th pop. 15–69                                                                                     | 0.9             | 89   |
| 4.2.4 Venture capital recipients, deals/bn PPP\$ GDP                                                                | 0.0             | 71   | 7.3.3 Wikipedia edits/mn pop. 15–69                                                                                       | 30.0            | 104  |
| <b>4.3 Trade, diversification, and market scale</b>                                                                 | 61.1            | 90   | 7.3.4 Mobile app creation/bn PPP\$ GDP                                                                                    | 0.7             | 77   |
| 4.3.1 Applied tariff rate, weighted avg., %                                                                         | 13.3            | 127  |                                                                                                                           |                 |      |
| 4.3.2 Domestic industry diversification                                                                             | 84.0            | 70   |                                                                                                                           |                 |      |
| 4.3.3 Domestic market scale, bn PPP\$                                                                               | 287.7           | 54   |                                                                                                                           |                 |      |

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

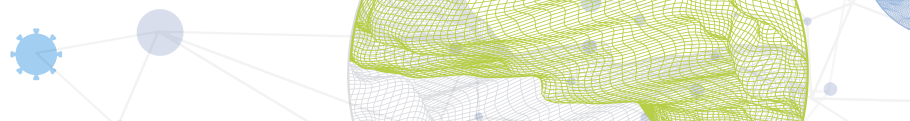
The following tables list data that are either missing or outdated for Sri Lanka.

### Missing data for Sri Lanka

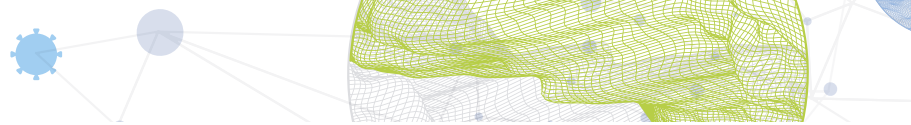
| Code  | Indicator name                                        | Economy year | Model year | Source                                                                                   |
|-------|-------------------------------------------------------|--------------|------------|------------------------------------------------------------------------------------------|
| 2.1.4 | PISA scales in reading, maths and science             | n/a          | 2018       | OECD Programme for International Student Assessment (PISA)                               |
| 2.2.2 | Graduates in science and engineering, %               | n/a          | 2018       | UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators |
| 5.3.1 | Intellectual property payments, % total trade         | n/a          | 2019       | World Trade Organization                                                                 |
| 6.1.3 | Utility models by origin/bn PPP\$ GDP                 | n/a          | 2019       | World Intellectual Property Organization                                                 |
| 6.3.1 | Intellectual property receipts, % total trade         | n/a          | 2019       | World Trade Organization                                                                 |
| 7.2.1 | Cultural and creative services exports, % total trade | n/a          | 2019       | World Trade Organization                                                                 |
| 7.2.3 | Entertainment and media market/th pop. 15–69          | n/a          | 2020       | PwC                                                                                      |

### Outdated data for Sri Lanka

| Code  | Indicator name                                 | Economy year | Model year | Source                                                                                   |
|-------|------------------------------------------------|--------------|------------|------------------------------------------------------------------------------------------|
| 2.1.5 | Pupil-teacher ratio, secondary                 | 2018         | 2019       | UNESCO Institute for Statistics                                                          |
| 2.3.1 | Researchers, FTE/mn pop.                       | 2017         | 2019       | UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators |
| 2.3.2 | Gross expenditure on R&D, % GDP                | 2017         | 2019       | UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators |
| 4.2.4 | Venture capital recipients, deals/bn PPP\$ GDP | 2018         | 2020       | Refinitiv Eikon                                                                          |
| 5.1.1 | Knowledge-intensive employment, %              | 2018         | 2019       | International Labour Organization                                                        |
| 5.1.2 | Firms offering formal training, %              | 2011         | 2019       | World Bank                                                                               |



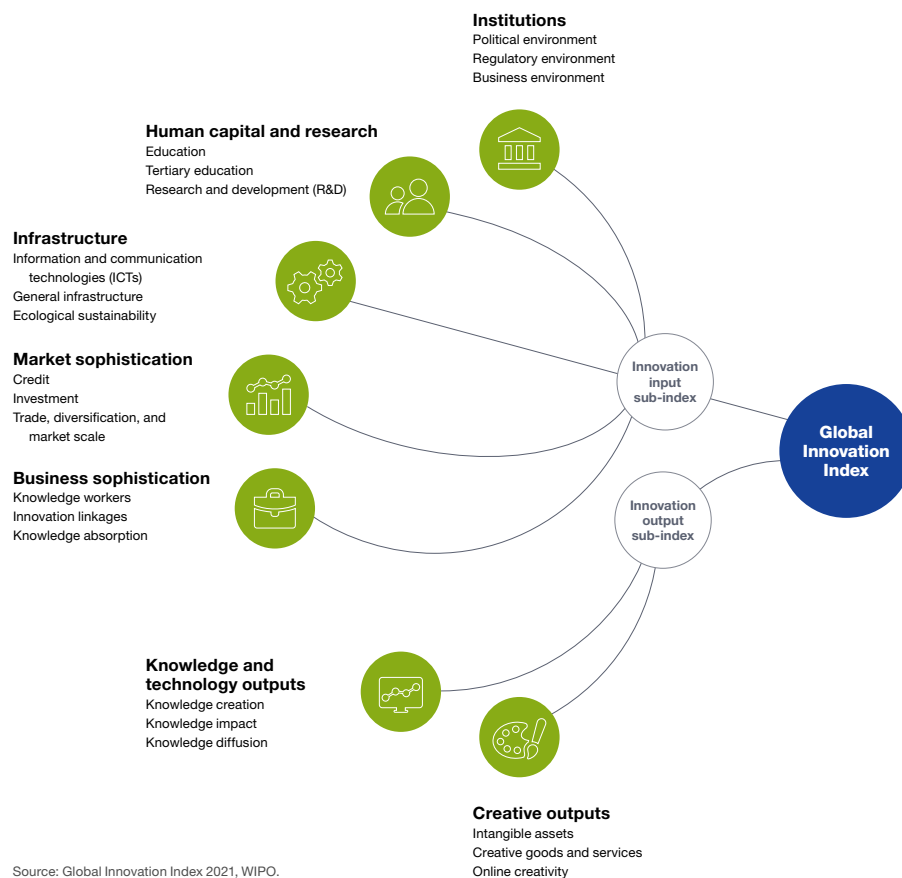
| Code  | Indicator name                            | Economy year | Model year | Source                                                                                   |
|-------|-------------------------------------------|--------------|------------|------------------------------------------------------------------------------------------|
| 5.1.3 | GERD performed by business, % GDP         | 2017         | 2019       | UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators |
| 5.1.4 | GERD financed by business, %              | 2017         | 2018       | UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators |
| 5.1.5 | Females employed w/advanced degrees, %    | 2018         | 2019       | International Labour Organization                                                        |
| 5.2.3 | GERD financed by abroad, % GDP            | 2017         | 2018       | UNESCO Institute for Statistics                                                          |
| 5.3.2 | High-tech imports, % total trade          | 2017         | 2019       | United Nations, COMTRADE                                                                 |
| 5.3.5 | Research talent, % in businesses          | 2017         | 2019       | UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators |
| 6.3.3 | High-tech exports, % total trade          | 2017         | 2019       | United Nations, COMTRADE                                                                 |
| 7.2.2 | National feature films/mn pop. 15–69      | 2013         | 2017       | UNESCO Institute for Statistics                                                          |
| 7.2.4 | Printing and other media, % manufacturing | 2017         | 2018       | United Nations Industrial Development Organization                                       |
| 7.2.5 | Creative goods exports, % total trade     | 2017         | 2019       | United Nations, COMTRADE                                                                 |



## 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.