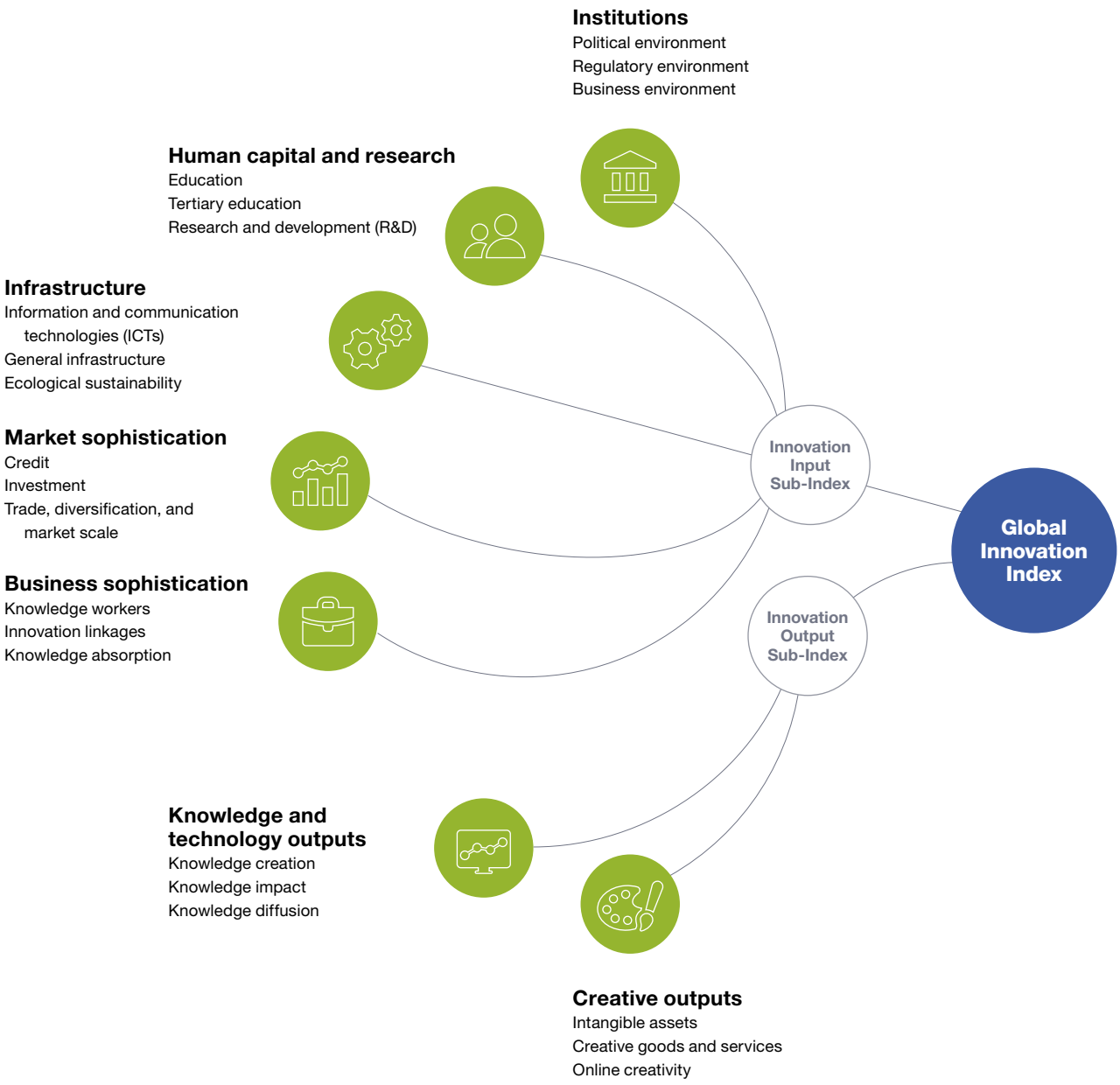
GII 2021 Economy profiles

The following tables provide detailed profiles for 132 economies

Framework of the Global Innovation Index 2021



Source: Global Innovation Index 2021, WIPO.

How to read the Economy profiles

The following tables provide detailed profiles for each of the 132 economies in the Global Innovation Index 2021. They are composed of four sections.

1 The top section provides the overall Global Innovation Index (GII) rank for each economy.

2 The next section provides eight key metrics at the beginning of each profile that are intended to put the economy into context. They present the Innovation Output Sub-Index rank, Innovation Input Sub-Index rank, the income group to which the economy belongs, its geographical region,[1] population in millions,[2] GDP in billion US$ PPP, and GDP per capita in US$ PPP.[3] The last metric provides the GII 2020 rank for the economy.

Because economies may drop out of or enter the GII, and due to adjustments made to the GII framework every year and other technical factors not directly related to actual performance (missing data, updates of data, etc.), the GII rankings are not directly comparable from one year to the next. Please refer to Appendix I for details.

The Innovation Input Sub-Index rank is computed based on the simple average of the scores in the first five pillars, while the Innovation Output Sub-Index rank is computed based on the simple average of the scores in the last two pillars. Scores are normalized values to fall within the 0–100 range.

3 Pillars are identified by an illustrative icon, sub-pillars by two-digit numbers and indicators by three-digit numbers. For example, indicator 1.3.1, ease of starting a business appears under sub-pillar 1.3, Business environment, which in turn appears under the pillar, Institutions 🏛.

The 2021 GII includes 81 indicators and three types of data. Composite (or index) indicators are identified with an asterisk (*), survey questions are identified with a dagger (†), and the remaining indicators are all hard data series.

As far as possible, we provide the original value of the indicators (frequently scaled in our index). This has been achievable for all hard data (with the exception of indicators in sub-pillar 7.3, for which the raw data were provided on condition that only the normalized scores were published), meaning that 56 indicators are reported as values. Normalized scores in the 0–100 range are provided for the 25 other indicators (which often consist of survey data or indices) as well as for the overall index, sub-pillars and pillars.

When data are either not available or out of date, "n/a" is used with a cutoff year of 2011, with a few exceptions. To the right of the indicator name, a clock symbol is used to indicate that the economy's data for that indicator are older than the base year. For information on data exceptions and limitations and a detailed explanation of the GII framework, see Appendix I. For further details on the indicators' sources and definitions, see Appendix III.

4 On the far right-hand side of each column, strengths of the economy in question are indicated by a solid circle ● and weaknesses by a hollow circle ○. Strengths within the economy's income group are indicated by a solid diamond ◆ and weaknesses by a hollow diamond ◇. The only exceptions to the income group strengths and weaknesses are the top 25 high-income economies, whose strengths and weaknesses are computed within the top 25 group.[4]

All rankings of 1, 2 and 3 are highlighted as strengths, except in particular instances at the sub-pillar level where strengths and weaknesses are not signaled when the desired data minimum coverage (DMC) is not met for that sub-pillar.[5] For the remaining indicators, strengths and weaknesses of a particular economy are based on the percentage of economies with scores that fall above or below its own score (i.e., percent ranks).

For a given economy, strengths ● are those scores with percent ranks greater than the 10th largest percent rank among the 81 indicators in that economy.

For that same economy, weaknesses ○ are those scores with percent ranks lower than the 10th smallest percent rank among the 81 indicators in that economy.

Similarly, for a given economy, income group strengths ◆ are those scores that are above the income group average plus the standard deviation within the group.

For that same economy, income group weaknesses ◇ are those scores that are below the income group average minus the standard deviation within the group.

In addition, economies with a sub-pillar that does not meet the DMC requirement will show the score for that sub-pillar within square brackets. Those that have more than one sub-pillar that fails to meet the DMC requirement in the same pillar will also show the ranks of the pillar where these are located within square brackets. For these pillars and sub-pillars, strengths/weaknesses are not signaled.

Notes

1 Economies are classified according to the World Bank Income Group Classification (June 2020). Geographic regions correspond to the United Nations publication on standard country or area codes for statistical use (M49), as follows: EUR = Europe; NAC = Northern America; LCN = Latin America and the Caribbean; CSA = Central and Southern Asia; SEAO = South East Asia, East Asia, and Oceania; NAWA = Northern Africa and Western Asia; SSF = Sub-Saharan Africa.

2 Data are from the United Nations, Department of Economic and Social Affairs, Population Division, World Population Prospects: The 2019 Revision.

3 Data for GDP and GDP per capita are from the International Monetary Fund's World Economic Outlook 2020 database.

4 As the only economy in the top 25 that does not fall within the high-income group, China's income group strengths and weaknesses are computed within the non-top 25 group.

5 Data stringency requirements are used in the attribution of strengths and weaknesses at the sub-pillar level. These levels were revised in 2019. When economies do not meet a DMC requirement at the sub-pillar level (for sub-pillars with two indicators, the DMC is 2; for three it is 2; for four it is 3; and for five it is 4), no strength or weakness is attributed to them at the sub-pillar level. Furthermore, if the economy in question does not meet the DMC requirements at the sub-pillar level, but it still obtains a ranking higher than or equal to 10, or a ranking equal to or lower than 100 at the sub-pillar level, for the sake of caution this rank is shown in brackets. This is to ensure that incomplete data coverage does not lead to erroneous conclusions being drawn about strengths or weaknesses, or, particularly, about strong or weak sub-pillar rankings.