Quality of scientific research institutions

1. **What does this benchmark show?**
   This benchmark shows how leading business executives assess the quality of scientific research institutions. High index values indicate that leading business executives in the country assess that the local scientific research institutions are among the best in the world in their specific field.

2. **Why is this benchmark of relevance to a country’s international competitiveness?**
   High quality in scientific institutions is central to a high level of research, and makes it easier to attract foreign students and scientists as well as foreign investment in R&D.

3. **Source and methodology**
   The data is conducted by the World Economic Forum (WEF) from the Executive Opinion Survey which measures how the topic in question is perceived by leading business executives. The WEF is an independent international organization. WEF publishes a yearly Global Competitiveness Report, ranking countries by their level of economic competitiveness. WEF works closely with a network of over 150 Partner Institutes that administer the Executive Opinion Survey in their respective countries. This collaboration helps to ensure that the Survey is conducted according to guidelines and in a consistent manner across countries during the same time of the year. WEF typically receives around 15,000 responses from approximately 140 economies worldwide.

   Survey questions ask for responses on a scale of 1 to 7, where an answer of 1 and 7 always corresponds to the worst and best possible outcome, respectively. The data editing process entails a number of statistical procedures: excluding surveys with a completion rate inferior to 50 pct. (partially completed surveys demonstrate a lack of sufficient focus on the part of the respondent), applying a multivariate outlier analysis (to assess whether each individual survey is representative by deleting clear outliers), applying a univariate test at country level (the standardized score method is used, indicating how many standard deviations any one individual answer deviates from the mean of the country sample) and finally computing a moving average (makes results less sensitive to the specific point in time) by combing sector-weighted country averages (to take the economy structure of a country into account) for the current and past year.

   For this particular benchmark the respondents (the leading business executives) are asked to assess the quality of scientific research institutions in their country. The Executive Opinion Survey was designed to capture information that is not otherwise available at global level. A quality assessment is a rather unquantifiable parameter otherwise, so a survey among a representative group of respondents is a good way to gain insight in this area.

   Source:
   [Executive Opinion Survey](#)