

### **Short methodological note**

#### **Data Sources:**

- The Corruption Perceptions Index (CPI) 2011 is an aggregate indicator calculated using data from 17 sources provided by 13 reputable institutions. All sources measure the overall extent of corruption (frequency and/or size of bribes) in the public and political sectors, and all sources provide a ranking of countries, i.e. include an assessment of multiple countries.
- The CPI 2011 brings together data from sources covering the past two years. For the CPI 2011, this includes surveys published between December 2009 and September 2011.
- The sources used in the CPI 2011 draw on the perceptions of both resident and non-resident experts and are a mixture of business surveys, assessments by commercial risk analysts and country experts from international institutions.
- In the CPI 2011, the following nine sources provided data based on expert analysis: African Development Bank, Asian Development Bank, Bertelsmann Foundation, Economist Intelligence Unit, Freedom House, Global Insight, Political Risk Services, the World Bank and the World Justice Project. Four sources for the CPI 2011 reflect evaluations by resident business leaders of their own country: IMD, Political and Economic Risk Consultancy, Transparency International's Bribe Payers Survey and the World Economic Forum.
- For CPI sources that are business surveys, and where multiple years of the same survey are available, data for the past two years is included. This applied to the IMD, Political and Economic Risk Consultancy and the World Economic Forum, where surveys from both 2010 and 2011 were included.
- For sources where scores were provided by experts (risk agencies/country analysts), only the most recent iteration of the assessment is included.

#### **Steps to calculate the CPI:**

1. The first step to calculate the CPI is to standardise the data provided by the individual sources (that is, translate them into a common scale). We use a matching percentiles technique which uses the ranks of countries as reported by each individual source. This method is useful for combining sources that have different distributions. While there is some information loss in this technique, it allows all reported scores to remain within the bounds of the CPI, i.e. to remain between 0 and 10.
2. The second step consists of performing what is called a beta-transformation on the standardised scores. This increases the standard deviation among all countries included in the CPI and makes it possible to differentiate between countries.
3. Finally, the CPI scores are determined by averaging all of the standardised values for each country. There must be three separate data sources available for a country to be scored and ranked.

#### **Results:**

- The CPI score and rank are accompanied by the number of sources, the highest and lowest values given to every country by the data sources, the standard deviation and the confidence range for each country.
- The confidence range is determined using a bootstrap (non-parametric) methodology, which allows us to interpret the precision of the CPI score of each country, based on the distribution of the source data. A 90 percent confidence range is then identified, where there is a five percent probability that the CPI score is below and a five per cent probability that the value is above this confidence range.

*For a more detailed explanation of the CPI method please visit [www.transparency.org/cpi](http://www.transparency.org/cpi)*