The Methodology of the Corruption Perceptions Index 2006

The Corruption Perceptions Index (CPI) is a composite index, using data compiled between 2005 and 2006. Twelve surveys of business people and assessments by country analysts from nine independent institutions enter the CPI.

All sources employ a homogeneous definition of "extent of corruption". The assessments are gathered from experienced respondents and enhance our understanding of real levels of corruption.

Comparisons to last year's index should be based on scores. However, such comparisons can be misleading because of methodological changes between years.

Non-parametric statistics are used for standardizing the data and for determining the precision of the scores.

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1. Introduction

The goal of the CPI is to provide data on extensive perceptions of corruption within countries. The CPI is a composite index, making use of surveys of business people and assessments by country analysts. It consists of credible sources using diverse sampling frames and different methodologies. These perceptions enhance our understanding of real levels of corruption from one country to another.

Unbiased, hard data continue to be difficult to obtain and usually raise problematic questions with respect to validity. Comparing the number of prosecutions, for example, does not reflect actual levels of corruption but the quality of prosecutors. International surveys on perceptions therefore serve as the most credible means of compiling a ranking of nations.

Overall, 12 sources are included in the CPI 2006, originating from 9 independent institutions. The complete list of sources is presented in the appendix. All in all, the number of countries in the CPI increased from 159 to 163.

Sources in 2006

Guidelines have been set up which govern the decision-making process regarding the selection of sources for the CPI. These guidelines include the actual criteria that a source needs to meet in order to qualify for inclusion as well as how the final decision is reached with the help of the Transparency International Index Steering Committee. This process aims at making the final decision on the inclusion of sources as transparent and robust as possible. As a result of this it was decided that the CPI 2006 includes data from the following sources:

- **CPIA**, the Country Policy and Institutional Assessment by the IDA and IBRD (World Bank), 2005
- **EIU**, the Economist Intelligence Unit, 2006.

- **FH**, Freedom House Nations in Transit, 2006.
- **IMD**, the International Institute for Management Development, Lausanne. We use the two annual publications from 2005-2006.
- **MIG**, Grey Area Dynamics Ratings by the Merchant International Group, 2006.
- **PERC**, the Political and Economic Risk Consultancy, Hong Kong. We use the two annual publications from 2005-2006.
- **UNECA**, United Nations Economic Commission for Africa, African Governance Report 2005.
- **WEF**, the World Economic Forum. We use the two annual publications from 2005-2006.
- **WMRC**, the World Markets Research Centre, 2006.

An essential condition for inclusion is that a source must provide a ranking of nations. This condition is not met if a source conducts surveys in a variety of countries but with varying methodologies. Comparison from one country to another would not be feasible in this case.

Another condition is that sources must measure the overall extent of corruption. This is not the case if aspects of corruption are mixed with issues other than corruption, such as political instability or nationalism, or if changes are measured instead of the extent of corruption. Background documents of previous years provided examples of sources that failed to qualify.[1]

The CPIA combines corruption with varied aspects of good governance such as transparency, accountability and independence of the media. However, it was judged that these do not add a new aspect to the index but rather describe a variety of methods for anti-corruption and provide wording for "absence of corruption".

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[1] See the framework documents of earlier years, e.g. http://www.icgg.org/downloads/FD_CPI_2004.pdf

The CPI 2006 combines assessments from the past two years to reduce abrupt variations in scoring that might arise due to random effects. WEF, IMD and PERC conduct annual surveys and data from 2005 and 2006 are included.

While this averaging is valuable for the inclusion of surveys, it is inappropriate for application to the data compiled by professional risk agencies and expert panels. Such assessments as compiled by CPIA, EIU, FH, MIG, UNECA and WMRC are conducted by a small number of country experts who regularly analyze a country's performance, cross-checking their conclusions with peer discussions. Following this systematic evaluation, they then consider a potential upgrading or downgrading. As a result, a country's score changes rather seldom and the data shows little year-to-year variation. Changing scores in this case are the result of a considered judgment by the organization in question. To then go back and average the assessments over a period of time would be inappropriate, so for each assessment only the most recent iteration is included.

The CPI 2006 is no longer a three-year-moving average as previously but now a two-year instrument, using data only from 2005 and 2006, disregarding data from 2004. The reason for this minor methodological change was to rely more on topical data. While the CPI is not a perfect measure of up-to-date anti-corruption policies, it was felt that this modification improves the topicality of the individual country assessments, without unduly lowering measurement precision.

Year-to-year comparisons

Comparisons to the results from previous years should be based on a country's score, not its rank. A country's rank can change simply because new countries enter the index and others drop out. A higher score is an indicator that respondents provided better ratings, while a lower score suggests that respondents revised their perception downwards. However, year-to-year comparisons

of a country's score may not only result from a changing perception of a country's performance, but also from a changing sample and methodology. Data from CU and II (see last year's background paper) dropped out of the index in 2006 and CPIA entered.

The index primarily provides a snapshot of the views of business people and country analysts, with less of a focus on year-to-year trends. However, to the extent that changes can be traced to a change in the assessments provided by individual sources, trends can be identified. Comparing older data (that is, data that was used for the CPI 2005[2] but no longer used this year) with topical data from 2006 allows us to identify such changes in perceptions. Countries whose CPI 2006 score decreased relative to the CPI 2005 and where this deterioration is not the result of technical factors are Brazil, Cuba, Israel, Jordan, Laos, Seychelles, Trinidad and Tobago, Tunisia and USA. The considerable decline in their scores of at least 0.3 does not result from technical factors – actual changes in perceptions are therefore likely.

With the same caveats applied, on the basis of data from sources that have been consistently used for the index, improvements of at least 0.3 can be observed for Algeria, Czech Republic, India, Japan, Latvia, Lebanon, Mauritius, Paraguay, Slovenia, Turkey, Turkmenistan and Uruguay.

Trends relating to developments between 1995 and 2005 have recently been determined in a comprehensive investigation. A report on the findings was provided in the *Global Corruption Report 2006*.[3]

2. Validity

All sources generally apply a definition of corruption such as the misuse of public power for private benefit, for example brib-

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[2] These data are EIU 2005, FH 2005, IMD 2003, MIG 2005, PERC 2003, WEF 2003 and WMRC 2005.

[3] Lambsdorff, J. Graf (2006), "Ten Years of the CPI: Determining trends" in: *Global Corruption Report 2006*, Transparency international.

ing of public officials, kickbacks in public procurement, or embezzlement of public funds. Each of the sources also assesses the "extent" of corruption among public officials and politicians in the countries in question:

- CPIA asks for ineffective audits, conflicts of interest, policies being biased towards narrow interests, policies distorted by corruption, and public resources diverted to private gain on a scale from 1 (bad) to 6 (good).
- EIU asks its panel of expert to assess the incidence of corruption and defines corruption as the misuse of public office for personal (or party political) financial gain. Integers between 0 (denoting a "very low" incidence of corruption) and 4 (denoting a "very high" incidence) are provided.
- FH asks its panel of expert to assess the implementation of anticorruption initiatives; the government's freedom from excessive bureaucratic regulations and other controls that increase opportunities for corruption; public perceptions of corruption; the business interests of top policy makers; laws on financial disclosure and conflict of interest; audit and investigative rules for executive and legislative bodies; protections for whistleblowers, anticorruption activists, and others who report corruption; and the media's coverage of corruption.
- IMD surveys elite business people and asks them to assess whether "bribing and corruption prevail or do not prevail in the economy."
- MIG asks its panel of correspondents assess levels of corruption. Corruption in their definition ranges from bribery of government ministers to inducements payable to the "humblest clerk".
- PERC asks expatriate business people to rate on a scale of zero to 10 how bad they considered the problem of corruption to be in the country in which they are working as well as in their home country.

- UNECA determines the extent of control of corruption via its local expert panel. This includes aspects related to corruption in the legislature, judiciary, at the executive level and in tax collection. Aspects of access to justice and government services are also involved.
- WEF asks: "In your industry, how commonly would you estimate that firms make undocumented extra payments or bribes connected with:"
  1 – exports and imports
  Common |1|2|3|4|5|6|7| Never occur
  2 - public utilities (e.g. telephone or electricity)
  Common |1|2|3|4|5|6|7| Never occur
  3 - annual tax payments
  Common |1|2|3|4|5|6|7| Never occur
  4 – public contracts
  Common |1|2|3|4|5|6|7| Never occur
  5 - loan applications
  Common |1|2|3|4|5|6|7| Never occur
  6 - influencing laws and policies, regulations, or decrees to favor selected business interests?
  Common |1|2|3|4|5|6|7| Never occur
  7 – getting favorable judicial decisions
  Common |1|2|3|4|5|6|7| Never occur
  From these questions the simple average has been determined.
- WMRC provides an assessment of the likelihood of encountering corrupt officials. Corruption can range from petty bureaucratic corruption (such as the paying of bribes to low-level officials) right through to grand political corruption (such as the paying of large kickbacks in return for the awarding of contracts). Scores take the following values: 1; 1.5; 2; 2.5; 3; 3.5; 4; 4.5; 5. They have the following meaning:
  1. This country will have an excellent business environment and corruption will be virtually unknown.
  2. This country will have a good and transparent business environment. Corruption - official and otherwise - may occur occasionally, but most businesses will not encounter this.
  3. This country will have some signifi-

cant operational obstacles, including corruption. However, whilst official corruption may be relatively common, it should not affect business in an overly negative manner.

4. This country will have a poor business environment. Corruption is likely to be endemic in the business world and officialdom, and it will not be uncommon for kick-backs or bribes to be demanded in return for the awarding of contracts.

5. This country will have severe operational obstacles, which in practice make business impossible. Corruption will be pervasive and will reach the highest levels of government.

The various terms used by the sources "prevalence", "commonness", "frequency", "likelihood", "problematic" and "severity" are closely related. They all refer to some kind of extent of corruption. This common feature of the various sources is particularly important in view of the fact that corruption comes in different forms. It has been suggested in numerous publications that distinctions should be made between these forms of corruption, e.g. between nepotism and corruption in the form of monetary transfers. Yet, none of the data included in the CPI emphasize one form of corruption at the expense of other forms. The sources can be said to aim at measuring the same broad phenomenon. As has been emphasized in the background documents of previous years, the sources do not distinguish between administrative and political corruption.

TI commissioned the World Economic Forum to include questions this year that focus on the difference between petty and grand corruption: "How commonly do firms like yours make facilitating extra payments or bribes to lower-level public servants?" and "How commonly do firms like yours make facilitating extra payments or bribes to high ranking politicians, political parties and senior public servants to secure business?"

As revealed by respondents, the two forms of corruption are strongly correlated with a correlation coefficient across 125 countries of 0.956. The mean response provided by ca. 10,800 respondents to question 4.12 (petty corruption) was 5.24 while the one to question 4.13 (grand corruption) was 5.57, revealing that grand corruption is perceived by the business people surveyed to be less common. In the following countries grand corruption is regarded to be more common than petty corruption: Cyprus, France, Iceland, Italy, Mauritania, Mauritius, Namibia, Taiwan and Zambia. In the following countries petty corruption is perceived to be much more pronounced than grand corruption: Bangladesh, Cambodia, Cameroon, Egypt, Greece, Mali, Mongolia, Romania, Tajikistan, Tanzania and Vietnam.

The strong correlation of these two datasets emphasizes that the overall level of corruption is the most important piece of information, providing justification for the CPI to report only one single figure.

3. Samples, perceptions and reality

While the sources all aim at measuring the extent of corruption, the sample design differs considerably. Basically, two different types of samples are used.

A first group of sources, namely CPIA EIU, MIG and WMRC, assemble the perceptions of non-residents, turning in their experienced perception with regard to foreign countries. These assessments are carried out by respondents from developed countries of the western hemisphere such as North America and Western Europe, supported by networks of local correspondents.

There is an advantage to perceptions vis-à-vis foreign countries because they are not vulnerable to a "home-country bias". Such a type of bias would be relevant if respondents assess their home country purely according to local standards. Such a standard would be problematic because it can differ from one country to another, impairing the validity of cross-country compari-

sons.

A second group of sources, namely IMD, FH, PERC, UNECA and WEF, gather assessments made by residents with respect to the performance of their home country. These respondents are partly nationals but sometimes also resident expatriates from multinational firms. While such data might be susceptible to the aforementioned "home-country bias", they are not susceptible to introducing an undue dominance of "western business people's" viewpoint. Such a viewpoint would be inadequate if foreigners lack a proper understanding of a country's culture.

The data correlate well with each other, irrespective of these different methodologies. The high correlations ameliorate fears that any of the aforementioned biases are important to the results. The residents sampled for the respective purpose may have a rather universal ethical standard and adequately position their country as compared to foreign countries. Likewise, those respondents who assess foreign countries seem to have a good grasp of a country's culture and appear free of prejudice.

Critics raised concern that the CPI might reproduce what it has in the past been propagating. The Transparency International Corruption Perceptions Index has gained wide prominence in the international media since 1995. This might introduce a problem of circularity. Respondents might "go with the herd" instead of submitting their experienced judgment. This hypothesis was tested. In 2006 respondents to the WEF-survey were asked: "How well do you know the Transparency International Corruption Perceptions Index?" (1 = unknown; 6 = well known). 4778 respondents picked 1-3, while 4764 turned in numbers equal or above 4. The CPI is least well known in Ireland, Malta, Bulgaria, Iceland, Australia, Serbia and Montenegro, Cyprus and Italy. It is most well known in Zimbabwe, Panama, Kenya, Paraguay, Slovak Republic, Germany, Mauritius, Bangladesh and Czech Republic.

From the respondents to the WEF two different corruption indices have been determined, one by those who know the CPI well (responses 4-6) and another one by those who do not know the CPI (responses 1-3). Both these indices have been compared with the CPI 2005. The sample familiar with the CPI produces an index that correlates slightly less (0.89) with the CPI 2005 than the sample that does not know the CPI (0.90). This indicates that knowledge of the CPI does not induce respondents to "go with the herd". Knowledge of the CPI may equally motivate respondents to determine their own position more clearly. This is a strong indicator that currently there is no circularity in our approach.

In sum, the perceptions gathered are a helpful contribution to the understanding of real levels of corruption.[4]

4. The index

Standardizing

Each of the sources uses its own scaling system, requiring that the data be standardized before each country's mean value can be determined. This standardization is carried out in two steps.

Older sources that were already standardized for the CPI of a previous year enter the CPI 2006 with the same values. New sources are standardized using matching percentiles. The *ranks* (and not the scores) of countries is the only information processed from each source. For this technique the common sub-samples of a new source and the previous year's CPI are determined, meaning that countries that appear *only in either* in the new source or in the old CPI are disregarded. Then, the largest value in the CPI is taken as the standardized value for the country ranked best by the new source. The second largest value is given to
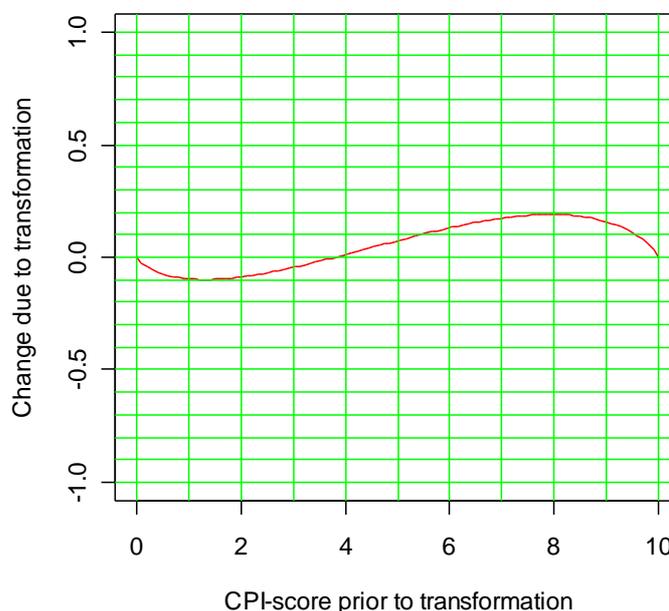
the country ranked second best, etc.[5] Imagine that a new source ranks only five countries: UK (4.2), Singapore (3.9), China (2.8), Malaysia (2.7) and India (2.4). In the CPI 2005 these countries obtained the scores 8.6, 9.4, 3.2, 5.1 and 2.9, respectively. Matching percentiles would now assign UK the best score of 9.4, Singapore second best with 8.6, China 5.1, Malaysia 3.2 and India 2.9.

Matching percentiles is superior in combining indices that have different distributions. It uses only the ordinal information provided by a source, disregarding the cardinal information. Many of the alternative parametric standardization methods, on the other hand, require a multitude of assumptions – some of which may not be realistic.

However, as matching percentiles makes use of the ranks and not the scores of sources, this method loses some of the information inherent in the sources. What tips the balance in favor of this technique is its capacity to keep all reported values within the bounds from 0 to 10. This results because any standardized value is taken from the previous year's CPI, which by definition is restricted to the aforementioned range. Such a characteristic is not obtained by various alternative techniques, e.g. one that standardizes the mean and standard deviation of the joint sub-samples of countries.

Figure 1: Beta Transformation

CPI-score prior to transformation

Step 2

Having obtained standardized values that are all within the reported range, a simple average from these standardized values can be determined. However, the resulting index has a standard deviation that is smaller than that of the CPI of previous years. Without a second adjustment there would be a trend towards a continuously smaller diversity of scores. If, e.g., Finland were to repeat its score from the previous year, it would have to score best in all sources. If it scores second to best in any source, the standardized value it obtains after using matching percentiles and aggregation would be lower than its current score. Thus, given some heterogeneity among sources, it seems inevitable that Finland's score would deteriorate over time. The opposite would be true of Haiti, which would obtain a better score if it is not consistently rated worst by all its sources. A second standardization is required in order to avoid a continuous trend to less diversity among scores.

However, simply stretching the scores (by applying a simple mean and standard deviation technique) might bring

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[5] If two countries share the same rank, their standardized value is the simple mean of the two respective scores in the CPI. The scores for countries where no CPI value was available are determined by referring to the two countries scoring higher and lower in the source's ranking. Linear interpolation is applied to their scores, suggesting that if a source assigns such a country a score close to the upper neighbor, also its standardized value is closer to that of this neighbor. If such a country is ranked best (or worst) by a source it would have only one neighbor, not two. The second neighbor is constructed by using the highest (or lowest) attainable score by the source and the CPI value 10 (or 0). This approach guarantees that all values remain within the range between 10 and 0.

Table 1:[1] Pearson Correlation	IMD 2005	IMD 2006	PERC2006	PERC2005	WEF 2005	WEF 2006	EIU 2006	FH 2006	WMRC 2006	CPIA 2005	MIG 2006	UNECA 2005
IMD 2005	1.00	0.98	0.96	0.95	0.93	0.93	0.93	0.84	0.90		0.90	
IMD 2006	0.98	1.00	0.97	0.95	0.93	0.92	0.93	0.78	0.91		0.89	
PERC2006	0.96	0.97	1.00	0.95	0.91	0.91	0.94		0.97		0.93	
PERC2005	0.95	0.95	0.95	1.00	0.97	0.96	0.86		0.95		0.96	
WEF 2005	0.93	0.93	0.91	0.97	1.00	0.96	0.86	0.80	0.91	0.22	0.86	0.63
WEF 2006	0.93	0.92	0.91	0.96	0.96	1.00	0.88	0.82	0.91	0.27	0.88	0.61
EIU 2006	0.93	0.93	0.94	0.86	0.86	0.88	1.00	0.86	0.90	0.51	0.87	0.54
FH 2006	0.84	0.78			0.80	0.82	0.86	1.00	0.92	0.63	0.88	
WMRC 2006	0.90	0.91	0.97	0.95	0.91	0.91	0.90	0.92	1.00	0.52	0.88	0.57
CPIA 2005					0.22	0.27	0.51	0.63	0.52	1.00	0.57	0.24
MIG 2006	0.90	0.89	0.93	0.96	0.86	0.88	0.87	0.88	0.88	0.57	1.00	0.56
UNECA 2005					0.63	0.61	0.54		0.57	0.24	0.56	1.00
1) Only correlations that relate to at least 6 countries are reported												

about values that are beyond our range from 0 to 10. A more complicated standardization is required for the second step: A beta-transformation. The idea behind this monotonous transformation is to increase the standard deviation to the previous year's value, while preserving the range from 0 to 10. Each value (X) is therefore transformed according to the following function:

$$10 * \int_0^1 (X/10)^{\alpha-1}(1-X/10)^{\beta-1} dX$$

This beta-transformation is available in standard statistics programs. The crucial task is to find the parameters α and β so that the resulting mean and standard deviation of the index have the desired values, that is, values that are equal to that of the CPI 2005 for a joint subsample of countries. An algorithm has been determined that carries out this task. Applying this approach to the CPI 2006, the change in the scores is depicted by figure 1. The parameters are α= 1.091 and β=1.114. As shown in the figure, scores between 3.8 and 10 are increased slightly, while those between 0 and 3.8 are lowered.

The beta transformation is first applied to all values that were standardized in step 1. Afterwards the average of these are computed to determine a country's score. In our publication we also report the high-low

easily be misunderstood as measuring the performance of a country with absolute precision. This is certainly not true. Since the first CPI was produced in 1995, TI has provided data on the standard deviation and the number of sources contributing to the index. This data serves to illustrate the inherent imprecision. Also, the high-low range is provided in the main table. This depicts the highest and the lowest values provided by our sources, so as to portray the whole range of assessments. However, no quick conclusions should be derived from this range to the underlying precision with which countries are measured. Countries which were assessed by 3 or 10 sources can have the same minimum and maximum values, but in the latter case we can feel much more confident about the country's score. In order to arrive at such measures of precision, other statistical methods are required.

An indicator for the overall reliability of the CPI 2006 can be drawn from the high correlation between the sources. This can be depicted from the Pearson correlation in table 1.[6] The correlations on average are

Reliability and Precision

A ranking of countries may

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[6] The correlations refer to all countries, even those not included in the CPI. An nonparametric correlation coefficient (Kendall's tau) tends to be on average 0.15 lower.

0.82. This suggests that the sources do not differ considerably in their assessment of levels of corruption. The correlations of CPIA are lower as compared to those of other sources. However, this source includes only less-developed countries. As evidenced also by other sources, measurement precision is generally lower for less-developed countries. Thus, the lower correlation does not imply lower reliability of the CPIA dataset.

Confidence range

The confidence range is determined by help of a bootstrap methodology. The principal idea of such a bootstrap confidence range is to resample the sources of a country with replacement. Imagine a country with the five source values (3.0; 5.0; 3.9; 4.4; 4.2). An example of such a sample with replacement would be (5.0; 5.0; 4.2; 4.4; 4.4). While the mean value of the original data is 4.1, that of our sample with replacement is 4.6. This value portrays how diverse the mean could have been if a different random selection of values were drawn from of the original pool of data.

A sufficiently large number of such samples (in our case 10,000) are drawn from the available vector of sources and the sample mean is determined in each case. Based on the distribution of the resulting 10,000 mean values, inferences on the underlying precision can been drawn. The lower (upper) bound of a 90% confidence range is then determined as the value where 5% of the sample's means are below (above) this critical value.[7]

There are two interesting characteristics of the resulting confidence range.[8]

1) When requiring a 90% confidence range (which allows with 5% probability that the true value is below and with 5% probability that the value is above the determined confidence range) the upper (lower) bound will not be higher (lower) than the highest (lowest) value provided by a source. This implies that our range from 0 to 10 will never be violated.

2) The confidence range remains valid even if the data (i.e. the standardized values for a given country) are not normally distributed. The range is even free of assumptions with regard to the distribution of these data.

However, with only few sources being used, there is a downward bias in the confidence range thus reported. When only few sources are available these do not fully capture the whole range of possible values. This misrepresentation becomes larger the fewer the sources that are available. This issue is part of a general statistical problem that is not specific to our application: One simply cannot expect accurate estimates of a confidence interval from few observations.

In order to determine the size of this bias Walter Zucchini and Florian Hoffmann from the Institute for Statistics and Econometrics, University of Göttingen, wrote a short unpublished research paper. Given

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[7] There can arise boundary effects when only 3 or 4 sources exist. Only 10 different combinations are possible in the case of 3 sources, suggesting that a 5% confidence point can "hit" the boundary. If this is the case, the BC-approach could produce at random two different values for the upper (or the lower) confidence point. These boundary effects have been identified and, if existent, the more conservative range is reported in the table.

[8] In addition to the "percentile" method just described, more complicated approaches exist. First,

the confidence levels can be adjusted if (on average) the mean of a bootstrap sample is smaller than the observed mean. The relevant parameter is called z_0. Another adjustment is to assume the standard deviation also to be dependent on the mean of the bootstrap sample. The relevant parameter is a. If both these adjustments are considered, the resulting approach is called a bootstrap-BC_a-method (bias-corrected-accelerated). A description of this approach can be obtained from Efron, B. and R. Tibshirani (1993), *An Introduction to the Bootstrap*, Chapman & Hall: New York and London: 202-219, chap. 14.3, 22.4 and 22.5. One concern with the BC_a approach is that it is throwing a lot of machinery at very few observations. Due to statistical considerations, a simple method might prove superior. Brad Efron had therefore suggested the use of a BC-approach for our purpose. In this case, z_0 is determined endogenously from the bootstrap sample but a is set equal to zero.

that the data are approximately beta distributed, various simulation tests were required. They found that the unbiased coverage probability is lower than its nominal value of 90%. The accuracy of the confidence interval estimates increases with a growing number of sources (n). The mean coverage probability is 65.3% for n=3; 73.6% for n=4; 78.4% for n= 5; 80.2% for n=6 and 81.8% for n=7. While the confidence range nominally relates to a 90% level, an unbiased estimate of the confidence level is lower.
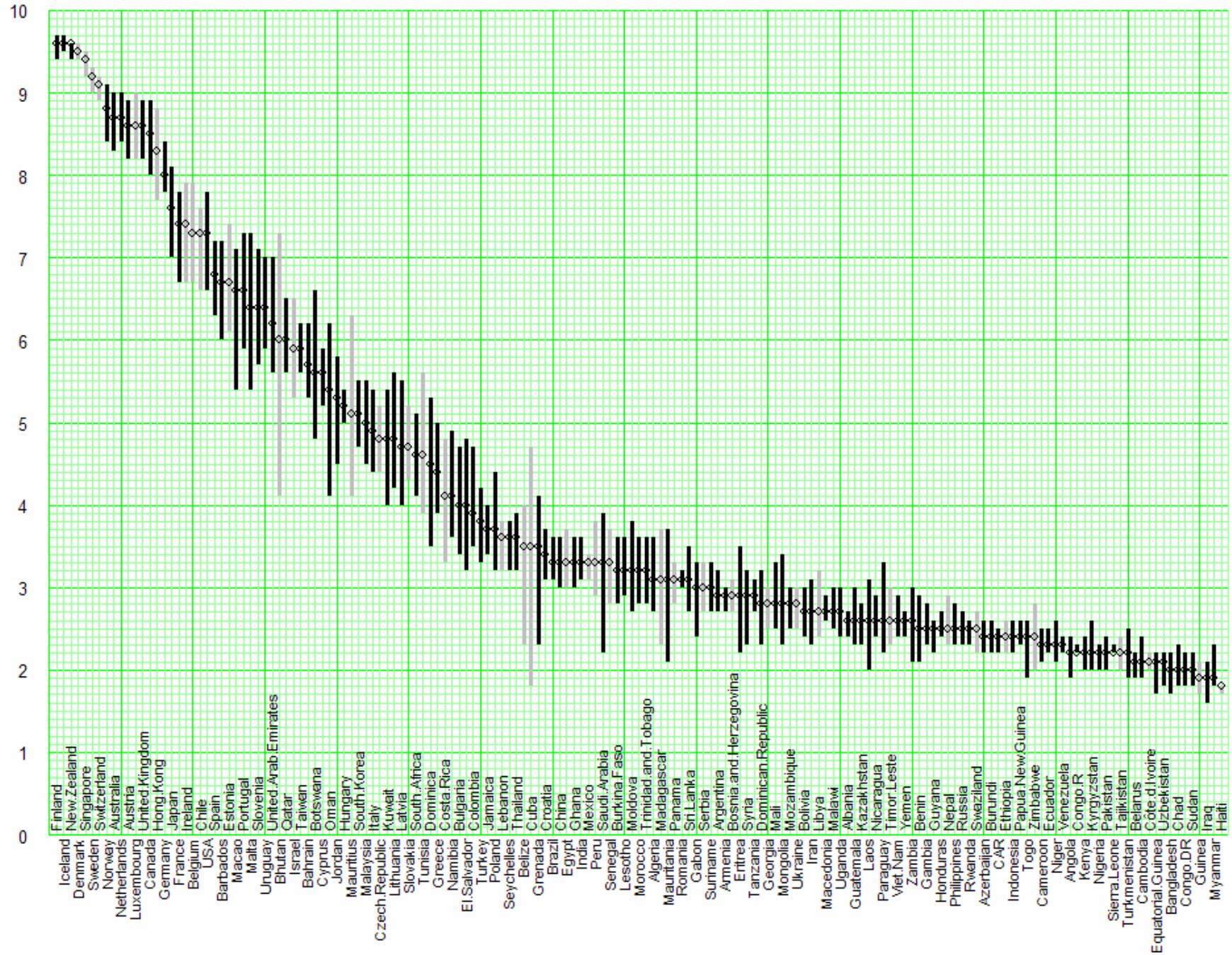
When interpreting the confidence range these results have to be born in mind. Figure 2 portrays the confidence ranges alongside with the scores.

The strength of the CPI is based on the concept that a combination of data sources combined into a single index increases the reliability of each individual figure. As in previous years, the CPI 2006 includes all countries for which at least three sources had been available. The idea of combining data is that the non-performance of one source can be balanced out by the inclusion of at least two other sources.[9] This way, the probability of misrepresenting a country is seriously lowered. Overall, the CPI is a solid assessment of perceived levels of corruption, helping our understanding of real levels of corruption.

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[9] This argument is valid even in case the sources are not totally independent of each other. Such partial dependency may arise if some respondents are aware of other people's perception of the level of corruption, or of other sources contributing to the CPI.

Figure 2: 2006 CPI and approximate confidence intervals
The coverage probability is 65%-75% (gray lines) or 80%-90% (black lines)

Appendix: Sources for the TI Corruption Perceptions Index (CPI) 2006

Number	1	2	3
Abbreviation	CPIA	EIU	FH
Source	World Bank (IDA and IBRD)	Economist Intelligence Unit	Freedom House
Name	Country Policy and Institutional Assessment	Country Risk Service and Country Forecast	Nations in Transit
Year	2005	2006	2006
Internet	http://web.worldbank.org/WBSITE/EXTER-NAL/EXTABOUTUS/IDA/0,,contentMDK:20933600~menuPK:2626968~pagePK:51236175~piPK:437394~theSitePK:73154,00.html	www.eiu.com	http://www.freedomhouse.org/research/nattransit.htm
Who was surveyed?	Country teams, experts inside and outside the bank	Expert staff assessment	Assessment by experts originating or resident in the respective country.
Subject asked	Corruption, conflicts of interest, diversion of funds as well as anti-corruption efforts and achievements	The misuse of public office for private (or political party) gain	Extent of corruption as practiced in governments, as perceived by the public and as reported in the media, as well as the implementation of anticorruption initiatives
Number of replies	Not applicable	Not applicable	Not applicable
Coverage	76 countries (eligible for IDA funding)	157 countries	29 countries/territories

Number	4	5	6
Abbreviation	IMD		MIG
Source	IMD International, Switzerland, World Competitiveness Center, Lausanne, Switzerland		Merchant International Group
Name	World Competitiveness Yearbook		Grey Area Dynamics
Year	2005	2006	2006
Internet	www.imd.ch/wcc		www.merchantinternational.com
Who was surveyed?	Executives in top and middle management; domestic and international companies		Expert staff and network of local correspondents
Subject asked	Bribery and corruption in the economy		Corruption, ranging from bribery of government ministers to inducements payable to the "humblest clerk"
Number of replies	More than 4000		Not applicable
Coverage	51 countries		155 countries

Number	7	8	9
Abbreviation	PERC		UNECA
Source	Political & Economic Risk Consultancy		United Nations Economic Commission for Africa
Name	Asian Intelligence Newsletter		Africa Governance Report
Year	2005	2006	2005
Internet	www.asiarisk.com/		http://www.uneca.org/agr/
Who was surveyed?	Expatriate business executives		National expert survey (between 70 and 120 in each country)
Subject asked	How bad do you consider the problem of corruption to be in the country in which you are working as well as in your home country?		"Corruption Control". This includes aspects related to corruption in the legislature, judiciary, and at the executive level, as well as in tax collection. Aspects of access to justice and government services are also involved
Number of replies	More than 1,000	More than 1,000	Roughly 2800
Coverage	12 countries	14 countries	28 countries

Number	10	11	12
Abbreviation	WEF		WMRC
Source	World Economic Forum		World Markets Research Centre
Name	Global Competitiveness Report		Risk Ratings
Year	2005/06	2006/07	2006
Internet	www.weforum.org		www.wmrc.com
Who was surveyed?	Senior business leaders; domestic and international companies		Expert staff assessment
Subject asked	Undocumented extra payments or bribes connected with various government functions		The likelihood of encountering corrupt officials, ranging from petty bureaucratic corruption to grand political corruption
Number of replies	10,993	Ca. 11,000	Not applicable
Coverage	117 countries	125 countries	186 countries

The Methodology of the TI Corruption Perceptions Index 2006