

Background Paper to the  
2000 Corruption Perceptions Index

Framework Document

*Johann Graf Lambsdorff*

Transparency International (TI) and

Göttingen University

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The Corruption Perceptions Index is a composite index.

The data used this year were compiled between 1998 and 2000. Comparisons to last year's index are not feasible.

This document explains which data entered into the index and how this data was standardized and aggregated.

It is discussed how corruption is defined by our sources and how the perceptions gathered relate to reality.

## 1. The methodology

Transparency International's Corruption Perceptions Index (CPI) has assumed a central place in debates about corruption. It is used by economists, academics, business people and journalists. As in previous years, we therefore provide this framework document which provides an in-depth explanation of the methodology. This document complements the press materials and another background paper explaining the precision of the results.

The goal of the CPI is to provide data on extensive perceptions of corruption within countries. This is a means of enhancing understanding of levels of corruption from one country to another. It does not attempt to assess the degree of corruption practiced by nationals outside their own countries. This is a separate phenomenon and a separate instrument, the Bribe Payers Propensity Index (BPI), was published last year for the first time.

In an area as complex and controversial as corruption, no single source or polling method has yet been developed that combines a perfect sampling frame, large enough country coverage, and a fully convincing methodology to produce comparative assessments. This is why the CPI has adopted the approach of a composite index. It consists of credible sources using different sampling frames and various methodologies and is the most statistically robust means of measuring perceptions of corruption.

### Objective versus subjective data

Unbiased, hard data is difficult to obtain and usually raises difficult questions with respect to validity. One such set of data has been assembled by the Crime Prevention and Criminal Justice Division of the United Nations Office at Vienna, [United Nations 1999]. This is a survey of national agencies in a large variety of countries called the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems. The major goal of this investigation has been to collect cross-nationally comparative data on the incidence of reported

crime and the operations of criminal justice systems. The questionnaire consists of a series of questions which ask for data, primarily statistical, on the main components of the criminal justice system. The latest version of this survey relates to the years 1990 to 1994. All national data are derived from the official national criminal statistics.<sup>1</sup> However, the precise legal definition of bribery and corruption can be different in each national context, the differences drawn between bribery, embezzlement and fraud may be troublesome and the statistical methodology of counting and aggregating used in each national agency can differ considerably from that used elsewhere. Apart from this, countries such as Singapore and Hong Kong have extremely high per capita conviction rates for bribery. This lends itself to the conclusion that the data are to a large extent determined by the effectiveness and capacity of a country's judiciary in prosecuting corruption. High levels in this case indicate the success of anti-corruption initiatives rather than high levels of actual corruption. As such problems commonly arise with objective data, international surveys on perceptions serve as the most credible means of compiling a ranking of nations.

### Sources in 2000

Prior to selecting sources guidelines have been set up which organize the underlying decision making process. These include the actual criteria that a source needs to meet in order to qualify for inclusion as well as organizational guidelines on how the final decision is reached with the help of the Transparency International Steering Committee. This process aimed at making the final decision as transparent and robust as possible. As a result of this it was decided that the 2000 CPI includes data from the following sources:

- ◆ Freedom House Nations in Transit (FH),
- ◆ the Economist Intelligence Unit (EIU),

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<sup>1</sup> A full description of the methodology and the complete data can be obtained via internet at: <http://www.ifs.univie.ac.at/~uncjin/wcs.html>.

- ◆ Political Risk Services (PRS),
- ◆ the Institute for Management Development, Lausanne (IMD),
- ◆ the International Crime Victim Survey (ICVS),
- ◆ the Political and Economic Risk Consultancy, Hong Kong (PERC),
- ◆ the World Bank and European Bank for Reconstruction and Development (WB),
- ◆ the World Economic Forum (WEF).

Other sources have also been suggested for inclusion. 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 are not feasible in this case and a ranking cannot be produced. Another condition is that sources must measure the overall level of corruption. This is violated if aspects of corruption are mixed with issues other than corruption or if changes are measured instead of levels of corruption.

The 2000 CPI combines assessments from the past three years to reduce abrupt variations in scoring. Such changes might be due to high-level political scandals that affect perceptions, but do not reflect actual changing levels of corruption. Some sources, such as WB and ICVS, provided only one recent survey. Others such as PERC, WEF and IMD conducted various surveys between 1998 and 2000, which are all included. In addition to its Global Competitiveness Report (GCR), the WEF also published the Africa Competitiveness Reports (ACR) in 1998 and 2000, which are also included.

While this averaging is valuable for the inclusion of surveys, it is inappropriate for application to the data compiled by country experts. Such assessments as compiled by PRS, FH and EIU are conducted by a small number of country experts who regularly analyze a country's performance, counter-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. On the other hand, in the case of elite or general public surveys an averaging over various years produces a useful smoothing effect. While some annual data may contain random errors, these do not necessarily carry over into the next year, and their impact is decreased by the averaging procedure. Overall, 16 sources could be included in the 2000 CPI, originating from 8 independent institutions. The complete list of sources is presented in appendix.

The number of sources has decreased slightly in 2000 as compared to 1999. This came about as the older sources from 1997 by Gallup International, the Wall Street Journal and the World Bank/University Basel have not been updated. Since they are older than 3 years they could no longer be included. While ICVS updated its data, not all survey results were processed at the time the CPI was compiled. Only a smaller sample of 11 countries could thus be considered for the CPI. All in all, the number of countries in the CPI slightly dropped from 99 last year to 90.

### **Year-to-year comparisons**

The CPI incorporates as many reliable and up-to-date sources as possible. One of the drawbacks to this approach is that year-to-year changes of a country's score do not only result from a changing perception of a country's performance but also from changes in sample and methodology. This is comparable to the problem of designing a price index for a basket of goods when the ingredients are changing. The price index for one period cannot be fully compared to that of the next since the basket on which it is based has changed. A similar problem arises with the CPI. Some sources are not updated and must be dropped as a result, while new, reliable sources are added. With differing respondents and slightly differing methodologies a change in a country's score cannot be attributed solely to actual changes in a country's performance.

Accordingly, TI repeatedly stresses that each year's index must be seen as the result of the sum of all reputable sources available at that time. Comparisons with the views collected in previous years can be misleading. In order to reduce the number of misleading interpretations of the CPI scores, the official CPI table does not include the scores from the previous year.

## 2. Validity

All sources generally apply a definition of corruption such as the misuse of public power for private benefits, e.g., bribing 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:

- ◆ The IMD asks respondents to assess whether "bribing and corruption prevail or do not prevail in the public sphere."
- ◆ The WEF asks in its Global Competitiveness Report "irregular, additional payments connected with import and export permits, business licenses, exchange controls, tax assessments, police protection or loan application are common/ not common." In the Africa Competitiveness Report it was additionally asked how "problematic the following areas are for doing business: ... corruption" and "when firms in your industry do business with the government, how much of the contract value must they offer in additional or unofficial payments to secure the contract?" For details see [Lambsdorff and Cornelius: 2000].
- ◆ The PERC asks "To what extent does corruption exist in the country in which you are posted in a way that detracts from the business environment for foreign companies?"
- ◆ The EIU defines corruption as the misuse of public office for personal (or party political) financial gain and aims at measuring the pervasiveness of corruption. Cor-

ruption is one of over 60 indicators used to measure "country risk" and "forecasting."

- ◆ The ICVS asks: "In some areas there is a problem of corruption among government or public officials. During 1999, has any government official, for instance a customs officer, police officer or inspector in your own country, asked you or expected you to pay a bribe for his service?"
- ◆ The PRS determines a variable "Corruption in Government" and assesses the overall spread of corruption.
- ◆ FH determines the "level of corruption" without providing further defining statements.
- ◆ The WB asks various questions with respect to corruption. One group of questions is directed towards determining the level of grand corruption and called "state capture". An aggregate measure for this variable is provided by the WB. To adequately balance this issue with the level of administrative corruption responses to the following question have been used: "It is common for firms in my line of business to have to pay some irregular 'additional payments' to get things done." For details see [Hellman, Jones and Kaufmann 2000] and [Hellman, Jones, Kaufmann and Schankerman 2000].

The terms "level", "problem", "prevalence", "pervasiveness" and "commonness" are largely identical. They all refer to some kind of "degree" of corruption, which is the also aim of the CPI. 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 phenomenon.

It is important to note that largely none of the sources differentiates between administrative and political corruption, and that both

types of corruption are addressed equally by the various questions posed. The IMD asks about corruption in the public sphere. This inevitably includes both corruption in administration and in politics, as they both constitute the public sphere. The WEF addresses particular areas where corruption can occur and in each of these, either politicians or administrators can be the relevant actors. Similarly, corruption in government, as assessed by the PRS, also includes both types of corruption, since administration and politics are each parts of government structures. The same applies to the broad definition used by FH. The EIU explicitly notes that its assessments include corruption among public servants and politicians alike. This largely justifies a blending of political and administrative corruption, since there is no strong evidence that countries differ in the prevalence of the one type of corruption over another. But the results by WB represent a challenge to the type of blending exercised for the CPI. It is observed there that in some countries grand political corruption is more prevalent while in others small scale administrative corruption dominates. This line of research is particularly promising for the future. Results are at this stage only available for transition economies and it will be crucial to observe whether they are also valid for other continents and robust to the usage of different methodologies.

The only source which does not clearly relate to large scale political corruption is the ICVS. But taking into account that this source (also in the past) well correlates with the other sources, there was no strong argument that also the extent of political corruption is not well represented by this data. The data on correlations are provided in another background paper which deals with the precision of the CPI.

### **Degrees of corruption**

As we have emphasized, the CPI aims to assess the "degree of corruption". But this term can suggest different interpretations, [Rose-Ackerman 1999: 4]. In order to confirm the validity of our approach, we must first clarify whether this term is unambiguous. Imagine

the simple case that 10 percent of all public servants take a bribe of \$200 each, 5 times a year in exchange for awarding a contract that results in a gain of \$500 each for corrupt private contractors. Degree could either relate the frequency of corrupt acts, the amount of bribes paid or the overall gain that contractors achieve via corruption.

While all of these definitions appear to be valid, they need not fully correlate with each other. For example, consider that a few high-ranking public servants are taking large bribes on the one hand, as opposed to many public servants engaging in petty corruption on the other. The total sum of bribes would be about the same in both cases, but the frequency of corrupt incidents would doubtlessly be higher in the latter case. Similarly, when corrupt private competitors are in a strong bargaining position and do not allow much of their illegitimate gain to be shared with public servants, the total amount of bribes may be low while total gains from corruption are large. Clearly, absence of corruption would be similarly defined in all three cases — i.e. frequency, amount of bribes and value of rents — as being equal to or nearly zero.

Having taken this theoretical look at degrees of corruption, we can now turn to the particular definitions used by our sources. First, the questions asked by the ICVS, WEF and the WB (on administrative corruption) relates to the frequency of bribes paid. In contrast to this, the questions by the PERC and the WB (on state capture) hint at the damage to private business people caused by corruption. The implication here might be that large bribes are particularly serious, while large benefits for corrupt private business people may not be. The questions posed by the IMD, PRS, FH and EIU provide no insight regarding an assessment of degree. The terms "level", "prevalence", "existence" and "pervasiveness" used there might refer to frequency as well as the overall value of bribes involved.

In sum, the term "level of corruption" seems to include both aspects, frequency of corruption and the total value of bribes paid. Taking into account that the sources correlate well with each other, we may conjecture that

at the moment there is little evidence that differences with respect to these two aspects are crucial to the outcome of a survey. Either, respondents have a very homogeneous pre-specified idea of how to define the "degree of corruption" which influences their response, irrespective of the precise wording of the questionnaire, or countries do not differ considerably with respect to the particular kinds of corruption that prevail there. More research, as the one by the WB, is required to deepen our understanding of the levels and types of corruption and the extent to which corruption differs between countries.

### 3. Perceptions and reality

While the sources all aim at measuring the degree of corruption, the sample design differs considerably. With the exception of the PERC, FH, EIU and PRS the sources mostly sample residents, who must rely on their personal, local estimate (as opposed to an expatriate's external viewpoint) of the degree of corruption and the meaning of the term in their own cultural context. Whether this difference may lead to different outcomes still requires scientific study. For the purposes of the CPI, it added to the robustness of the resulting figures, since the data correlate well with other data. This correlation suggests that there being different samples makes no great difference to the results.

Of greater importance is the difference between polls on the opinions of experts and the polls of the general public provided by the ICVS. Whereas the general public may tend to form views on the corruption (or lack of it) experienced in daily life, business people and risk analysts are usually closer to high-level incidents of corruption and may be in a better position to assess grand corruption. Furthermore, elites may have a biased viewpoint towards corruption insofar as they might be less negative about forms of corruption which favor their own group. Similarly, the general public may be less negative about petty forms of corruption. To what extent the general public deviates from an elite sample in its assessment of corruption has not yet been the

subject of investigation and constitutes an important area for future research. Various data on perceptions by the general public used for the CPI in previous years suggests no significant difference between these viewpoints.<sup>2</sup>

### Interpreting perceptions

As the data collected relates to perceptions rather than to real phenomena, it has to be considered whether such perceptions improve our understanding of what real levels of corruption may be. This is necessary for the CPI to be a fruitful contribution to political debate, investment decisions and academic research. Since actual levels of corruption cannot be determined directly, perceptions may be all we have to guide us. However, this approach is undermined to at least some extent, if the perceptions gathered are biased. Such a potential bias might originate from the particular cultural background of respondents. Depending on whether the sample consist of locals or expatriates, this suggests two potential biases to be relevant.

Imagine that being asked to assess the level of corruption, a local estimates a high level of corruption in the country of residence. Such an assessment would be a valid contribution to the CPI only if the respondent makes the assessment as a result of comparisons with the levels of corruption perceived in other countries. But this is not necessarily the viewpoint taken by the respondent. A respondent may also assign high levels by comparing corruption to other (potentially less pressing) problems facing the country, or by evaluating it according to a high ethical standard (e.g. which assumes any kind of gift-giving to a

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<sup>2</sup> Even when elite and general public viewpoints show some differences, an aggregation of these data still makes sense, just like price levels for various goods can be aggregated to form some combined price index. While the idea of creating a price index would be to value a complete basket of goods, the idea of aggregating subjective data would then be to obtain an assessment of the level of corruption as seen by a broad and possibly heterogeneous sample of respondents.

public official to be corrupt and not culturally acceptable). In the case of such an outlook, a high degree of observed corruption may reflect a high standard of ethics rather than a high degree of real misbehavior. Perceptions would be a misleading indicator for real levels of corruption. This bias can occur particularly if only locals are surveyed, each assessing only the level of perceived corruption in their own countries. If respondents are asked to assess foreign countries or to make comparisons between a variety of countries, this bias should not occur. Respondents will, in this case, compare a foreign country with their home country or with an even larger set of countries. They will be forced to apply the same definition of corruption and make use of the same ethical standard for all countries, which produces valid comparative assessments. However, in this context a second type of bias might arise, originating from the potential dominance of a particular cultural heritage in the sample questioned or because expatriates lack a proper understanding of a country's culture. If this happens, comparative assessments might reflect disproportionately the perceptions of a particular culture. But the results would be meaningless to locals who have a different understanding and definition of corruption. While samples which are dominated by a particular cultural heritage are susceptible to this kind of bias, surveys which question local residents clearly avoid this kind of bias.

The strength of the CPI rests with the idea that we include surveys which are not susceptible to the first type of bias. Particularly these are EIU, PRS, FH and PERC. Since the data provided by these sources refer to assessments by expatriates, they are subject to a homogeneous definition of corruption and a consistent ethical standard. The CPI also incorporates the data from the ICVS, IMD, WEF, and WB. Since these refer to assessments made by local residents, they are not likely to represent the perception of a certain cultural heritage. The second type of bias can clearly be rejected for these sources.

Since the data from the EIU, PRS, FH and PERC correlate well with the other data,

there seems to be no support for the suggestion that they might be influenced by the second type of bias. Similarly, since the data by the ICVS, IMD, WEF, and WB correlate well with the other three sources, the notion that the first type of bias might be present is clearly not supported. The validity of the sources is mutually confirmed and prevalence of the potential biases mentioned before can be rejected. Our approach clearly suggests that the perceptions gathered are a helpful contribution to the understanding of real levels of corruption.

### **The role of the media**

Another potential problem with the collection of perceptions may arise from the possibility that respondents do not report their personal experiences but rely on media coverage and reports obtained from others. Certainly this influence cannot be excluded and necessarily contributes to perceptions. Yet in its extreme form such an influence may suggest that respondents rely only on hearsay. The potential problem with this influence is that the assessment of a country might then reflect the quality of the press in uncovering scandals, and particularly its freedom to do so. Countries that suppress a free press may escape a bad reputation for corruption among their population. Such an influence would certainly undermine the validity of the CPI and its usefulness as an aid to understanding real levels of corruption.

Investigating whether such an influence might affect the CPI, it is worthwhile to observe that some sources may be more influenced by hearsay than others. It is particularly interesting that the question posed by the ICVS clearly relates to personal experience as opposed to hearsay. Already in the past we observed a large correlation of ICVS with other sources, which indicates that hearsay does not appear to be an important influence for the overall CPI.

## **4. The index**

With the various sources having some differences with respect to sample and date, a num-

ber of ideas have been considered for weighting the sources before aggregating them. One possibility was to weight them according to the number of replies collected by each source. However, this would mean that some surveys would obtain a large weight, particularly if seen against the expert assessments conducted by PRS, FH and EIU. If this line were pursued, it would mean that the views of an individual selected at random would have the same quality as an expert assessment made after country-specific analysis and peer review. This approach was therefore not convincing.

Another methodology for aggregating governance data has recently been suggested by Kaufmann, Kraay and Zoido-Lobaton [1999], based on a formal model. The authors assume that each source is a noisy indicator for actual levels of corruption, which is the "unobservable component" they seek to determine. Based on this model an average score and a measure of precision is obtained for a large variety of countries.<sup>3</sup> Those sources which then better correlate with the resulting aggregate index receive more weight, while those which contribute less viably enter into the index with less weight. The quality of the sources is therefore determined endogenously and is not an expert's opinion on a source's validity and reliability. While there may be a point in taking this approach, weighting can be biased if the sources are not independent of each other. It may occur that the sources that are least independent — for example because they use other sources as their benchmark or sample people who have little first-hand experience — are given higher weights than those who engage in discovering original insights. This weighting system would be in contrast to experts' viewpoints regarding the quality of

sources. Given this disadvantage it was decided that this approach should not be adopted for the TI-CPI.

In the end, it remains preferable to adopt the simple approach of assigning equal weights to those sources which have been found to meet the criteria of reliability and professionalism. Other procedures may have their merits, but this simple averaging system is easiest to explain to a broad public.

It was suggested in this context that data from various years provided by the same source should not obtain the same weight as other data. One may adhere to the viewpoint that the data provided by an institution is independent to that from another institution, but the same independence may not prevail for surveys originating from the same institution. But this argument may push too far an issue which is in fact difficult to assess, since also an institutions may lean on the data produced by others in reaching a conclusion. Since the matter of independence is therefore difficult to quantify, there was no clear argument in changing the methodology used so far. As a result of giving each survey an equal weight, some institutions obtain a larger weight than others. While other approaches can certainly be justified there is also some rational in this. It reflects previous recommendations by the Transparency International Steering Committee that continuous annual surveys are superior for our purposes than one-off surveys: they may have gathered more expertise in providing their service and their inclusion helps to avoid abrupt year-to-year changes in the CPI. In addition to that, continuous annual surveys may be seen to be superior to expert assessments because the methodology of producing data is more transparent and subject to a clear procedure.

### **Standardizing**

Since each of the sources uses its own scaling system, aggregation requires a standardization of the data before each country's mean value can be determined. For all sources not already standardized for the CPIs of previous years, the 1999 CPI was the starting point for this process. It had a mean value of 4.61 and a

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<sup>3</sup> With respect to measures of precision, some not necessarily realistic assumptions had to be introduced. The measures of precision therefore represent a best-case scenario and are not unbiased. In addition, they neglect the standard deviation between sources, i.e. that precision should be lower in countries where sources differ considerably in their assessment.



standard deviation of 2.36. Each of the sources naturally had different means and standard deviations. Yet standardization does not mean that each source is given the same mean and standard deviation, since each source covers a different subset of countries. Instead, the aim of the standardization process is to ensure that inclusion of a source consisting of a certain subset of countries should not change the mean and standard deviation of this subset of countries in the CPI. The reason is that the aim of each source is to assess countries relative to each other, and not relative to countries not included in the source. The aim here is that a country not be "punished" for being compared with a subset of relatively uncorrupt countries, nor rewarded for being compared with a subset perceived to be corrupt. In order to achieve this, the mean and standard deviation of this subset of countries must take the same value as the respective subset in the 1999 CPI.

An example can illustrate the standardization. In 2000, IMD assessed Brazil with a value of 2.57 on a scale between 0 and 10. At first, a common subset of countries was determined, countries which belong to both the IMD 2000 and the 1999 CPI. The means and standard deviations in each of these sources was determined. In the IMD 2000, these countries had a mean value of 4.79 and a standard deviation of 2.64, while in the 1999 CPI, these countries had a mean of 6.07 and a standard deviation of 2.41. Standardizing the value for Brazil thus required subtracting 4.79 from the 2.57,<sup>4</sup> multiplying the result with 2.41, dividing by 2.64 and adding 6.07. The result turns out to be 4.04, the standardized value for Brazil. Applying this to all countries in the subset, the standardized values then have a mean of 6.07 and a standard deviation of 2.41, the same values this subset of countries had in the 1999 CPI. The same formula is then applied to all countries covered in the IMD, including those that do not belong to the

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<sup>4</sup> In case a source assigns a higher score to more corrupt countries, this value must be multiplied by -1.

subset described above. After this is done for all countries and all sources, the index is determined by computing the simple mean for each country.<sup>5</sup>

The previous indices relied solely on a technique of standardizing means and standard deviations for the respective subsamples of countries. It was observed in the past that an alternative technique of matching percentiles would bring about largely identical results. Matching percentiles is superior in combining indices which are differently distributed. But, as it makes use of ranks and not scores of sources, it loses some of the information inherent in the sources. The general approach is therefore that it is preferable to rely on the described standardization technique, except where the distribution of a source clearly differs from that of the CPI.

One such source with a clearly different distribution is ICVS. It was decided that for ICVS the method of matching percentiles would be applied. For this technique again the common subsamples of the ICVS and the 1999 CPI are determined. Then, the largest value in the 1999 CPI is taken as the standardized value for the country ranking best by ICVS. The second largest value is given to the country ranking second best, etc.

For IMD and PERC, this standardization procedure did not change the values significantly, since the data was already delivered on a scale between 0 and 10. This contrasts to the values provided by WEF who report the data on a scale between 1 and 7. The WB provides two data on corruption, which were aggregated<sup>6</sup> before being standardized and included in the CPI. Likewise PRS and EIU provide assessments ranging between 0 and 6 and between 0 and 4, respectively. The original data by Freedom House were not given in numerical format but a "broader al-

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<sup>5</sup> A final standardization must be undertaken, since the aggregate may again differ with respect to mean and standard deviation as compared to the previous years index.

<sup>6</sup> Again, aggregation requires a standardization procedure by means and standard deviation.

phabetical grade" assigned to the respective categories. This implies that FH does not invite for a "cardinal" interpretation of their assessments which is required for the normal standardization methodology. By making use of a methodology of matching percentiles only the ordinal information by FH would be used. But also a normal standardization of the data provides an indicator which correlates 0.992 with the one obtained from matching percentiles. Given this it was decided to keep the normal standardization technique.

### **Presentation**

The 2000 CPI will include all countries for which at least three sources had been available. Some critics had argued in favor of extending the index to include also countries for which less than three sources are available. In this case the CPI would include 151 countries. There are undeniable merits to this. A larger list of countries would further facilitate the usage of the CPI in academic research. There has been an immense research activity based on the CPI, but the limited number of countries was sometimes felt to present a slight disadvantage. Above that, it was observed that limiting the index to countries where sufficient information is available would exclude particularly countries perceived to be corrupt, because information on such countries tends to be scarce. It was argued that this may mislead the public.

But these arguments must be valued against the respective disadvantages of a further expansion. In public debate, measures of precision are commonly not well taken into account — irrespective of the immense effort TI has put into the presentation of the CPI in the past. The method to avoid this misperception has been to restrict the index to those countries where sufficient information is available. These are countries where the margin of error of the reported average score is rather low. In contrast, countries with less than three sources are measured with large imprecision. It therefore makes sense to stick to this established guideline and include only those countries for which at least three sources were available. Since those countries left out

of the index are on average perceived to be rather corrupt, there emerges an inadequate comparison of a country to the rest of the world — an interpretation which TI did not invite for but which some media was engaged in. It may be worthwhile to note that all 151 countries would on average score 4.3. This figure may serve as a benchmark value. Particularly it illustrates that countries not being included into the CPI should not interpret this as a particular type of qualification or disqualification.

Some media misinterpret the fact that being worst in the index does not mean being most corrupt in the world. This year this position is occupied by Nigeria. But this misunderstanding would also not be alleviated by expanding the index, because the lowest position is simply assigned to another country, while the index would still not cover the whole world. Another suggestion was that the last 10 countries, those with the worst scores, be listed alphabetically, without publishing their scores, avoiding that a country is singled out. It would have been difficult to adequately present such a mixture of groups and ranks. But more pressing was the fear that a whole group of countries may have been branded as the worst in the world, "tying" for bottom place. This alternative was dropped as a consequence.

On the web-sites (<http://www.transparency.org/> and <http://www.uni-goettingen.de/~uwwv>) we provide further data for each country on the standard error, as described above, and the resulting confidence intervals. Moreover, some observers may be interested in the amount of independent institutions that contributed to an average value and not only the total number of sources. This figure is also reported. Apart from that, the CPI continues to rank countries and assign scores with one digit, as we have done in the past. Alongside this data the standard deviation and the number of surveys used for each country is reported.

In addition to this data, the main table this year for the first time provides the high-low range. 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 11 sources can have the same min-max range, but in the latter case the associated standard error is much smaller. In order to arrive at such measures of precision, a more comprehensive background paper is provided at our website.

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## Appendix: Sources used in the 2000 CPI

Number	1	2	3
Source	Political & Economic Risk Consultancy		
Name	Asian Intelligence Issue		
Year	1998	1999	2000
Internet address	<a href="http://www.asiarisk.com/">http://www.asiarisk.com/</a>		
Who was surveyed?	Expatriate business executives		
Subject asked	Extent of corruption in a way that detracts from the business environment for foreign companies		
Number of replies	280	40-50 per country	1027
Coverage	12 Asian countries		14 countries

Number	4	5	6
Source	Institute for Management Development		
Name	World Competitiveness Yearbook		
Year	1998	1999	2000
Internet address	<a href="http://www.imd.ch">www.imd.ch</a>		
Who was surveyed?	Executives in top- and middle-management; domestic and international companies		
Subject asked	Bribing and corruption exists in the public sphere		
Number of replies	2515	4314	4160
Coverage	46 countries	47 countries	

Number	7	8
Source	Economist Intelligence Unit	"International Working Group"
Name	Country Risk Service and Country Forecast	International Crime Victim Survey
Year	2000	1999/2000
Internet address	<a href="http://www.eiu.com">www.eiu.com</a>	<a href="http://ruljis.leidenuniv.nl/group/jfcr/www/icvs/Index.htm">http://ruljis.leidenuniv.nl/group/jfcr/www/icvs/Index.htm</a>
Who was surveyed?	Expert staff assessment (expatriate)	general public
Subject asked	Assessment of the pervasiveness of corruption among politicians and civil servants	During 1999, has any government official in your own country, asked you to pay a bribe for his service?
Number of replies	Not applicable	ca. 20,000
Coverage	115 countries	11 countries

Number	9	10
Source	World Bank and EBRD	Freedom House
Name	Business Environment and Enterprise Survey	Nations in Transit
Year	1999	1998
Internet address	<a href="http://www.worldbank.org/wbi/governance">http://www.worldbank.org/wbi/governance</a>	<a href="http://www.freedomhouse.org/">http://www.freedomhouse.org/</a>
Who was surveyed?	Senior businesspeople	Assessment by US academic experts and FH-staff
Subject asked	State capture and frequency of irregular, additional payments to public officials	Levels of corruption
Number of replies	3000	Not applicable
Coverage	20 transition economies	28 transition economies

Number	11	12	13
Source	World Economic Forum		
Name	Global Competitiveness Report		
Year	1998	1999	2000
Internet address	<a href="http://www.weforum.org">www.weforum.org</a>		
Who was surveyed?	Senior business leaders; domestic and international companies		
Subject asked	Irregular, additional payments connected with import and export permits, business licenses, exchange controls, tax assessments, police protection or loan application.		
Number of replies	3167	3934	4022
Coverage	53 countries	59 countries	

Number	14	15	16
Source	World Economic Forum	Political Risk Services	
Name	Africa Competitiveness Report	International Country Risk Guide	
Year	1998	2000	2000
Internet address	<a href="http://www.weforum.org">www.weforum.org</a>	<a href="http://www.prsgroup.com">www.prsgroup.com</a>	
Who was surveyed?	Senior business leaders; domestic and international companies	Expert staff assessment	
Subject asked	How problematic is corruption? irregular, additional payments are required and large in amount.	Assessment of "corruption in government"	
Number of replies	582	1800	Not applicable
Coverage	20 countries	26 countries	140 countries