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Is it wrong to rank?

A critical assessment of corruption indices

Tina Søreide

WP 2006: 1

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Contents

1. Information about corruption[1]

The extent of corruption in a society is often debated on the basis weak information. Data on corruption will usually have limitations since people involved in the crime seldom will speak out about their practice. However, there are several reasons why information about this problem is required. It is important to understand the phenomenon, explaining changes and determining efficient countermeasures. As a part of this, it is important to estimate the impact of anti-corruption initiatives that have been introduced.

The impact of most anti-corruption efforts is uncertain. Incentives to take part in corruption are not necessarily removed by more stringent regulation, and are hardly reduced if the probability of being detected in and convicted of corruption is not increased. There has, for example, been several international judicial improvements in controlling corruption in a number of countries, often as part of the implementation of new international conventions or as part of procurement reform. The enforcement of such improvements appears to be a challenge in many countries. When it comes to the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, there have been few court cases of cross-border corruption since its implementation, and the effect of the reform has been difficult to determine. The OECD evaluation process, the Phase 2 reports on Japan and the UK, highlights the fact that there is more to anti-corruption efforts than conventions (OECD, 2005a, 2005b).[2] In procurement reform too, we need information about the extent of corruption to monitor the actual anti-corruption impacts. In a business survey of Norwegian exporters conducted last year, 55% of the firms that participated, all of them with long experience in international markets, had no trust in procurement rules as an obstacle to corruption. Only 6% thought procurement rules could limit corruption efficiently (Søreide, 2006).

Another demand for information about the extent of corruption relates to aid. The problem of corruption is now widely recognized as a considerable obstacle to the efficiency of development aid.[3] Several donors have started to require a verification of corruption control as one of several conditions for continued aid, a policy that may prove important in encouraging critical improvement of governmental and judicial institutions in poor countries. Information about the level of corruption and the bureaucratic business environment are also important aspects in multinationals' entry decisions, which in many cases are far more important in raising developing countries' revenues than is aid.

The need for information about the extent of corruption has triggered a number of empirical studies. Several institutions have developed corruption-related criteria on which they rank countries. By far the most famous index of this sort is the Corruption Perceptions Index (CPI), published yearly by Transparency International (TI).[4] This index aims to measure what people think about corruption, and is not presented by TI as true facts about the actual levels of corruption. The CPI is an "index of

[1] This paper was prepared for the IV Global Forum on Fighting Corruption, Brasilia, Brazil, 7-10 June 2005. I wish to thank Susan Rose-Ackerman, Bertil Tungodden, Jacob Svensson, Johann G. Lambsdorff, Kalle Moene and Aslak Orre for valuable comments.

[2] The OECD examiners expressed concern about the complete lack of bribery cases actually investigated and brought to court in Japan and the UK. The press in both countries had reported widely on several cases of alleged bribery of foreign public officials.

[3] For more explanation, see Alesina and Weder (2002) and Svensson (2000), and also Tavares (2003) who finds a correlation between development aid and reductions in the levels of corruption. See information on the Bush Administration's Millennium Challenge Account: http://www.mca.gov/ (includes the evaluation of countries).

[4] http://www.transparency.org

indices"; it is composed from a number of different sources that all provide a relevant ranking of countries. The World Bank has constructed a similar index, which is part of its efforts to estimate the quality of governance.[5] The World Bank's approach to estimating corruption is similar to the methodology TI applies to make their ranking; several of the sources are the same, and the two indices correlate well. The main objectives behind the indices are to raise awareness, enable statistical research to understand and better confront the problem, and to encourage governments in their anti-corruption efforts.

The present paper explains that also significant challenges are presented by these corruption indices, and it raises a particular concern about their significance for developing countries. Some of the problems relate to the construction of the indices, others to the way in which the information is referred to. I will shortly explain how these indices are constructed and notify about some of the ambiguities in this information. Then I turn to their contents and discuss the problem of an unclear distinction between illegal and "legal" corruption. I discuss the common practice of interpreting these indices as reliable information about actual extents of corruption within a country, and I raise concerns that common misinterpretation of the CPI can be damaging. Proposals follow, first about how the challenges related to the CPI can be reduced, second on how its value as an anti-corruption tool can be enhanced. The paper concludes by summarizing the main arguments.

2. Limits of the CPI

Corruption estimation has been a topic of much debate, mainly since the CPI was first published in 1995. Since then, Transparency International has become the most important institution in collecting and distributing corruption-related information. The CPI is one of several ways in which TI systematizes such information. This index is the most famous and applied source on information about the level of corruption in countries, and therefore the issue of debate in this paper: to what extent is this detailed ranking fruitful and useful? Should its information be referred to with more caution? While the CPI gets the most attention, many of the comments on this type of estimation are relevant also to the World Bank index. TI and the World Bank are fully aware of measurement problems, and do indeed encourage debate.[6] Some of the recent contributions, to which I will return, are Svensson and Reinikka (2003), Andvig (2004), Rose-Ackerman (2004), Weber (2005) and Galtung (2005).

2.1 Construction and interpretation

The elements in the construction of the composite corruption indices are data from externally conducted polls and surveys and a method of scaling these data into one index. The data are collected by independent institutions, these are non-profit organizations and consultancy companies, and the respondents are business people, the general public and country analysts. When the surveys include several issues, only the data on corruption is applied for the corruption index. The assessment of a country is based on several data sources, and the data must represent current conditions, as well as a ranking of countries.

Each survey is given equal weight when integrated into the index, independently of age and correlation to the other surveys. For aggregation and accurate ranking, data from the different sources have to be standardized and converted into the same scaling system. This is mainly done by

[5] http://www.worldbank.org/wbi/governance

[6] TI publishes every year a background paper to the Corruption Perception Index (CPI) in which the methodology is explained (Lambsdorff, 2004). The World Bank describes their project, the methodology and various measurement problems in several papers; see Kaufmann, Kraay and Zoido-Lobaton (1999) and Kaufmann, Kraay and Mastruzzi (2005).

transforming the standard deviations and the means in the different sets of data, to fit with the mean value and standard deviation of the index from the previous year. When this is done for all the sources, the index is estimated by computing the simple mean for each country. The result is a CPI score between 0 and 10 for each country included in the index. Lambsdorff (2005) describes and explains the specific formula.

The strength of the composite indices lies in their ability to be more informative than individual data sources. However, given all the information about the methodology and the sources, the content of the index continues to be unclear to many of us. What does it mean that China is ranked number 71 with a score of 3.4, while the UK is ranked number 11 with a score of 8.6? The lack of a standardized approach to estimating the level of corruption makes it difficult to know whether the rankings reflect the number of transactions affected by corruption, legal or illegal activities, the level of bribes or the cost to society.

The relation between numbers on the ranking is unclear, and the ranking must be considered ordinal. A ranking of 6 does not imply that the country in question has twice the amount of corruption compared to a country with a ranking of 3; it just means that the former country has "more corruption".[7] The index is still readable as a presentation of the countries' ranking, but it is often referred to as if these precision problems were not present. It is also difficult to interpret a dynamic dimension of the index. The media pays significant attention to changes in the relative position of countries. "Is our country performing better this year?" However, if country X is ranked below country Y one year, then placed above it the next, it is difficult to tell if there has been a reduction of corruption in country X, or if there has been an increase of the problem in country Y. The change is also likely to be a matter of arbitrary fluctuations within the error band. A change of the score from one year to the next can of course represent a true change in the perceived level of corruption within a country. However, it can also be explained by a change of the mean and standard variation of the whole sample of countries, an inclusion of new sources, or an improvement in the methodology. Transparency International aims at using the most reliable and up to date sources, which also means that the contents of the underlying studies vary.

The problems related to definition and quantification mean that empirical research on corruption is also affected. There have been a number of studies in which the correlation between the level of corruption, as measured either by the World Bank indicator or TI's CPI, and some other phenomena is analyzed, such as economic growth, inequality, religion, barriers to trade, the level of foreign direct investment, and so on.[8] Independent of the quality of the calculation behind such studies, the extent to which we can rely on the conclusions is uncertain when the underlying information is weak.

2.2 Crimes or legal activities?

There have been numerous discussions about how corruption should be defined. A major problem is that the word is applied to activities that are both legal and illegal. This means that it is difficult to tell whether a bad score on a corruption index refers to officially permitted activities or to violations

[7] A cardinal index with a known mathematical ratio between two levels of corruption on the CPI would depend on how corruption is being measured (which is debated in the following sections). To illustrate the problem of imprecision in the present measure, assume that a bribe represents 10% of all payments in country X, while it represents only 2% of half of all transactions in country Y. If measuring the volume of corruption, that is the total sum paid in bribes, country X would be ten times more corrupt than country Y. If measuring the number of corrupt transactions, country X would be twice as corrupt as country Y.

[8] See Rose-Ackerman (2004) and Lambsdorff (2005) for annotated reviews of empirical research on the causes and consequences of corruption.

of the law. Some people will say that all kinds of corruption-like activity are harmful, and it is not important to distinguish between them. Others will consider this matter in the light of defamation, restrict the use of the term corruption to its legal sense, and try not to label people, companies or countries as "corrupt" unless there is good reason to assume that laws have been violated. When trying to estimate even less precise aspects of a society, such as the quality of governance or social capital, it is obvious that these are subjective and uncertain qualities. As for corruption, which also is a legal term, we do not have international consensus on the term's meaning, which should ideally have been in place before we started ranking countries based on people's subjective perceptions of its extent.

The impediments to reach such an international consensus are significant. The legal definitions of corruption and cross-border bribery of public officials differ somewhat from country to country. Even within countries there are doubts and discussions about the boundary between legal and illegal activities. Most jurisdictions have far too few precedents for this sort of legislation. No detailed judicial discussion will be undertaken in this paper. The following three grey zones are important, however, because (a) they are common to most countries, (b) they have not been clarified by the new international conventions, (c) they are causing most of the ambiguities about the term corruption, and (d) they tend to inhibit welfare improvements.

(i) Facilitation payments
Unofficial fees paid to get things done, and smaller bribes demanded for services that a public official is expected to provide in any case, such as the issuing of licenses or customs clearance. The justification for facilitation payments is often based on a lack of bargaining power. The question of whether the person who makes the payment commits an offence according to the cross-border legislation on corruption will depend on judicial details in his/her/its country of origin.[9]

Marketing
(ii) Marketing targeted at specific individuals who represent a client, either a public or private institution, where expensive gifts and excursions are offered to encourage informal relations with the potential client. Many firms claim this kind of marketing to be essential. While procurement rules are usually in place for large contracts to ensure free and fair competition, there will always be legal ways around these statutes. There are loopholes in the rules of exception which allow for direct negotiations, and there are ways of making it appear as if the procurement rules have been respected, by violating the rules of communication, for instance (Søreide, 2006). This form of influence deters competition, and thus welfare improvements.

Political pressure
(iii) Political pressure applied to influence the outcome of tenders on big contracts. This kind of pressure is conducted with the help of subsidies, export-credit deals, aid to the buyer linked formally or informally to the purchase, commercial pricing issues and trade barriers, tied defence/arms deals, or threats of political sanctions or specific voting in international organizations. These practices are difficult to attack legally, as they are carried out by political leaders at the highest state level.

[9] Most discussions on the grey zone of facilitation payments concentrate solely on the question of its cross-border legal status or its status according to the US Foreign Corrupt Practices Act, not its legal status locally (as if this were less important). It is therefore a disappointment that this issue is poorly described by the OECD anti-bribery convention, which leaves it to each single jurisdiction to determine whether these payments, if made to public officials in foreign countries, are legal or not. Bribes of more than $20, 000, for instance, should be illegal. When it can be defined as a "facilitation payment", the payer normally fears no corruption charges, due to unclear laws.

Domestic judicial clarifications will not automatically solve the CPI's problem of unclear legal meaning of the term corruption. Countries differ, for instance, inherently in their degree of institutionalizing influence on important financial decisions. In the USA it is legal to finance political parties. This is a form of lobbyism in which private firms pay huge amounts in campaign finance.[10] The border between lobbyism and corruption can be unclear. In its legal form, however, it may lead to political support for changes that mainly benefits individual firms or their executives, while consumer welfare is reduced. In many other countries, private influence on politics is not legalized or institutionalized in a similar manner. In other words, while payments made to influence specific political issues are legal in some places, this is called corruption in others. The outcome can be equivalent. The extent to which the respondents to the CPI's different surveys make a distinction at this point is not known; whatever they do will be wrong in terms of definitions. It is wrong to describe the practice as corruption when the payments are completely legal. In an international ranking of corruption, it would also be wrong not to include similar ways of buying influence.[11]

An index score is supposed to cover all kinds of corruption, from huge oil contracts to the payments made to get assistance when giving birth. Being this all-encompassing, the index fails to distinguish between the forms of corruption that represent welfare problems, and the corruption that functions as a substitute for prices or public solutions in cases of weak or absent public institutions. Rose-Ackerman (1999) makes an important distinction at this point. She explains why the basic feature of the market does not necessarily depend on the extent to which public services are legally privatized, or if more informal solutions are in function, and organized by means of facilitation payments/informal rates. The welfare implication depends on the presence of markets and the supply of the many different services requested, not necessarily on how the payments correspond to formal rules. The variation across countries, in the achievements made on how to organize or institutionalize public services, depends on their quality of governance, GDP level, political system, political stability, and so on. Weak states will easily come out as more corrupt when informal solutions, illegal payments and bribes occur to replace wages, for instance in the lack of governmental financial transfers to local providers of public services, such as education, health care, or infrastructure. To the extent to which this is a measurement problem for the CPI ranking, it is limited by the fact that the group of countries with widespread and harmful corruption overlaps considerably with the group of those that are unable to offer public services that they are required by law to supply.[12]

2.3 Perceptions and the actual extent of corruption

Measuring perceptions of corruption is meant to be a best possible solution to get indications of true levels of corruption in a situation with vast measurement challenges. Measuring different people's perceptions of corruption provides in itself interesting information about people's opinion. Some problems arise, however, when these data are treated as reliable information about the actual extent of corruption in a country.

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[10] Democratic challenges related to campaign finance are well described by Ackerman and Ayres (2002), and also by the recent Abramoff affair, in which a Republican lobbyist, prosecuted for bribery, tax evasion and fraud, is now willing to witness against a number of members of Congress and other officials. The Financial Times, Jan. 05, 2006.

[11] This problem points at the need to increase our vocabulary when discussing corruption-related problems, and make the language more precise, perhaps by use of words *like political grabbing, pre-determination of contracts, business climate qualities, deliberated bureaucratic delays, business corruption, fraud, theft, "legal corruption", facilitation payments,* and *quid pro quos.*

[12] See Miller, Grødeland and Koshechkina (2001) for an in-depth study of local citizens' experience of bureaucratic corruption. Galtung (2005) points to another related problem of surveying these forms of corruption, and says that "90% of the world is missing" in the CPI because the underlying surveys ignore large parts of the economies.

Many of us would consider newspaper headlines or court cases unreliable estimates of the actual frequency of corruption. Whereas regular media coverage of corruption might inform on freedom of speech, the media can be biased and interested in scandalizing the problem, or it may be controlled by the state. The number of court cases on corruption in a given country would not necessarily be a better indicator. The judicial system may not have the capacity to investigate and prosecute all the cases that emerge. In addition, the police force may lack the necessary independence, or may even be corrupt itself. However, the individual's opinion, and the view of the survey respondents who form the basis for the construction of the indices, will be influenced by the same sources, the media and court cases, and it is a question how detailed a country ranking should be made when based on perceptions.

One challenge is related to the quantification of the problem, which is highly ambiguous. It is not clear to what extent the level of corruption reflects the frequency of corrupt acts, the damage done to society or the size of the bribes. The polls and surveys behind the CPI ask different questions related to corruption, and do not cover precisely the same issue. Some sources aim at political corruption, while others ask about lower-level bureaucratic corruption. Most of the polls and surveys ask for a general opinion on the magnitude of the problem ("how widespread" is the problem), usually not the respondents' personal experiences, which basically means that they ask for people's subjective intuition of the extent of something unobservable. Given the discussion in the previous section, it is even unclear what this unobservable phenomenon is.

The respondents are, without explicit definitions, asked to quantify "the misuse of public office for private or political party gain" and encouraged to rate "the severity of corruption within the state." This strong reliance on individual perceptions makes the interpretation of the index too dependent on assumptions of how people develop their opinions. Rumours, prejudices or media attention have an impact on experts as well as on ordinary people. TI, being concerned about this matter, also states on their web page that the most important sources of information about corruption are media, friends and contacts. Of course, if several individuals share a perception of reality, the perception may reflect the truth, but this is far from obvious.

There are several reasons why a gap between perceptions and the actual level of corruption is to be expected. I will first discuss some problems due to ambiguities about definitions, and than go on to some systematic biases. People's perception of more or less of something is instinctively based on comparison. An estimation of the level of corruption, as an inexperienced quantification, may be based on comparison with the situation in a neighbouring country, the situation in countries where corruption is more or less frequent, what the situation ought to be, or their personal high ethical values. The problem of corruption in Italy may seem negligible compared to the situation in Bolivia. Compared to Sweden, however, Italy faces a big challenge. While corruption must be expected to vary between state institutions, economic sectors and professions, we cannot expect respondents to describe the average level of corruption within the country in question. The CPI should accordingly not be applied as an indicator of this average. The respondents' perceptions will also differ with their different perspectives, their background, wealth and experience. And, ironically, one of the more severe challenges to the objectivity of the CPI is probably its own fame. Many of the respondents, the experts in particular, "know" the level of corruption from the index published the previous year, and the most recent CPI will automatically be correlated with the previous ones. Andvig (2004) explains these problems by describing how informational cascades can easily develop and complicate the measurement of true levels of corruption.[13]

[13] Andvig (2004:347) explains: "the experts read the same reports and gauge other experts' statements. Since the assessments are often not based on individual experience, when expert X claims that corruption in country

The World Bank and Transparency International both make the assumption that the stochastic errors across the sub-indicators are independent. Given the respondents' way of developing their perceptions of the level of corruption, however, such dependence is likely to occur, as the different underlying surveys seldom ask for each individual respondent's own experience, but rather their general impression of the problem. One specific bias that has got some attention recently is a "poor is bad" effect: that poor countries are perceived to be corrupt simply because they are poor while rich countries come out as clean because they are rich.[14] Kaufmann et al. (2005) analyze this bias for the quality of governance, and conclude that the variance in the estimated quality of governance due to the measurement error must be implausibly strong for this effect to be significant. Their conclusion relies to a large extent on the above-mentioned assumption, that measurement error is uncorrelated across the different sources of data. Whether this bias is significant for the estimation of corruption levels is unclear. Weber (2005), who applies TI's Global Corruption Barometer to distinguish between respondents' perceptions and reported experiences, finds more evidence for this type of bias among the subjective variables.

2.4 Implications of publicity

We know that the unreliability of the CPI as an indicator for actual extents of corruption implies that countries are perceived as less or more corrupt than they actually are. TI's openness about the estimation problems increases the organization's credibility. One problem, though, is that the background documents and warnings about how to read the index are not, apparently, read by the public. Incorrect interpretation in the press is the rule rather than the exception, and, based on the CPI, countries are referred to as "the third most corrupt country in the world" and so on. The fallacy in this interpretation of the CPI, as true information about the extent of corruption, is described in the discussions above. In addition, the CPI does not include all countries, i.e. corruption can be even more frequent in the countries not included in the CPI.

The broad media attention paid to the CPI is often considered a value as it may improve the public's awareness of problems related to corruption. This is a value that clearly depends on perspective. Incorrect interpretation may have damaging implications, and developing countries are the most vulnerable to this problem. A poor ranking is undeniably a message to the world about flourishing corruption, fraud and bribes, about low ethical values, about greed, and about lousy politicians. The scepticism that develops towards the country and its inhabitants, the honest as well as the dishonest, may encourage anti-corruption campaigns. Whether anything is achieved in the form of welfare improvements is difficult to tell if this achievement balances for the local economic consequences, in the form of possible lost private investment and aid, for instance.

It is also difficult to gauge the local aggregated response to a signal of widespread corruption. Everybody will denounce this kind of practice in public, of course, but there will also be those who see new opportunities as it is apparently easy to obtain benefits with the help of corruption. Foreign firms may happen to worsen the local market culture by offering bribes or gifts above the "usual level".[15] In this way, the publishing of a poor corruption rating can contribute to higher levels of corruption in countries where the actual extent of corruption is lower than indicated by the CPI.

This self-fulfilling prophecy problem is general and also present when information about the extent of other forms of undesired activities in a society is published, such as tax evasion, the breaking of

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A is very high, expert Z has no clear evidence to the contrary, so when knowing X's statement it may be optimal to make an assessment close to hers. Informational cascades may easily develop in this context."

[14] See Glaeser et al. (2004) for a broader discussion of this problem.

[15] See Hellman et al. (2002) for a study of foreign investors' propensity to take part in local corruption.

speed limits, smuggling, and so on. Information that a specific offence is common has different effects on individuals. We still wish to be informed, but it is important to consider and limit possible undesired consequences.

The publicity around the CPI has indeed raised attention to the problem of corruption and thus probably had an impact on corruption control in a broader sense. It is, though, a challenge to single out the different mechanisms and determine their impact. During the years of the CPI we have seen far more international cooperation on this issue, significant judicial improvements and the removal of tax deductibility for cross-border bribery. Even so, the problems that prompted these efforts appear to be present at least to the same extent as one decade ago. Kaufmann et al. (2005) find no reason to assume that corruption is on the decrease worldwide.[16] The effect of anti-corruption efforts may still be positive. It takes some years to have a bearing on attitudes and choices, and we do not know what the situation would have been if these efforts had not been made.

3. Proposals

Given the noted limits to the CPI, we can hardly conclude that it is right to rank countries in the way it is being done in this index; it simplifies a complex phenomenon far too much. One solution is, of course, to accentuate the remarkable collection of data behind the composite corruption indices, and let the interpretation of a corruption level be up to each individual reader. These single indices and rankings, based on one individual question or a more measurable issue, for instance, do not bear the same risk of misinterpretation as all the information is visible. This is also a solution in research. The contribution to science is, for example, no less important if, rather than studying the correlation between economic growth and the CPI, we analyze the connection between GDP and the average number of procedures a firm has to go through to start up a business in different countries. If combined with one similar regression on firms' reported facilitation payments and one on the quality of antitrust institutions, it is far easier for the reader to comprehend the meaning of the study, and make his or her own interpretation of the link between growth and the more general but indefinite level of corruption.[17]

There are also several alternative approaches to information about the extent of corruption. This paper will not provide an overview, just a few relevant comments.[18] Svensson and Reinikka (2001, 2003) describe the use of local surveys to obtain more detailed information on the extent of corruption. Public expenditure tracking surveys (PETS) and business surveys in particular are able to provide more accurate information for the quantification of corruption locally, and also its implications and its geographical and sector-related variation. More projects of this type are expected. Donors concerned about the problem of providing aid to countries with a low score on the CPI will more frequently require PETS as a form of control and evaluation. Another relevant indicator of corruption is the functioning of antitrust institutions, or surveys that aim at gathering

[16] Kaufmann et al. (2005:14) find "substantial disagreement among sources about even the direction of changes in global averages of governance", and the measurement problems prevent the production of credible empirical results on global levels of corruption.

[17] Creativity in the search for relevant empirical information will often imply a need for theoretical studies to support or understand relations and incentives which point to connections between corruption and other, more measurable, phenomena. Our intuitive assumptions about correlations are not always sufficient, which is demonstrated in a few recent examples. The role of the media in controlling corruption is not necessarily as obvious as is often assumed (Vaidya, 2005); a bureaucratic crackdown may not lead to the expected reduction of corruption levels (Bjorvatn et al., 2005); whereas the role of the security of property rights in promoting growth may actually help us understand the link between corruption and inequality (Glaser et al., 2003).

[18] See the web pages of Transparency International and the World Bank for more information.

such information.[19] Corruption is not a problem if competition in all markets is free and fair, an understanding that can be applied to estimate the extent of corruption in several ways.[20]

Yet, these alternative approaches cannot replace the information provided by an index of corruption that informs about the estimated perceptions about the level of corruption in a large number of countries. It will never be possible to rank right on this issue. The estimation problems should not discourage TI, but rather encourage continued critical debate about presentation and methodological improvements.

3.1 Reduce precision in the presentation of the CPI

One overall ambition in the work to develop corruption indices will of course be to increase precision in the estimates. When presented to the public through newspapers, most readers are likely to assume that the precision is of the order of the steps in the ranking (one decimal), and that a country with the score 7.3 is less corrupt than a country with a score of 7.1. Further, the CPI is generally perceived by the public as an estimated corruption level, not as a perceived corruption level.

Together with the ranking of countries, TI publishes the margins of error, which indicate the "error bands". These are usually an order of magnitude higher than the precision in the ranking. As an example, a country like Malta, with the score of 6.8 on position 25 in the CPI of 2004, has an uncertainty band of 5.3 to 8.2; it could therefore be less corrupt than Canada on position 12 or more corrupt than Suriname on position 49. But since these uncertainty bands are rarely communicated to the audience by the press, the current presentation with decimal accuracy is misleading to many readers. The following specific points are noted:

(1) The margins of error are determined by the variability in the perception of the different sources behind the CPI. In theory all these sources will not be independent, and may be influenced by the same errors. The ranking is still made with the assumption that the margins of error are uncorrelated.

(2) Being a representation of perceptions, the margins of error refer only to variation in the perceptions, which do not include the total potential divergence between true and perceived levels of corruption. The fact that the CPI uncertainty estimates only indicate scatter among its sources, and not uncertainty in estimated corruption level, is well illustrated by a country score for Bolivia, for example, which is ranked 112 at score 2.3, with an uncertainty band only from 2.2 to 2.4. Such precision in a corruption estimate would be far from realistic.

As already mentioned, the position of the ranking can have consequences for countries and their inhabitants. This particularly applies to a perceived negative development from one year to the next, even if this will usually be far from significant, considering the large uncertainty bands. For these reasons, it is suggested that the precision of the CPI, if it is going to be published on the basis of its present methodology, will be reduced from decimal precision to whole numbers. This means that all

[19] The connection between competition and firms' propensity to offer bribes is not clear in the literature on corruption, partly because it is difficult to include in empirical estimations the dynamic aspect of how bribery may lead to market power (Svensson, 2003; Søreide, 2006).

[20] One approach is that applied by Transparência Brasil and Santa Catarina Supreme Audit Institution, which have collected information and compared prices on public purchases made by municipalities of the Brazilian state Santa Catarina since 1997. They also monitor how announcements of public procurement tenders compare with the requirements of the law. https://www.transparencia.org.br

the countries with a score of 9.5 and above would get a 10, from 8.5 to 9.4 would become 9, and so on.[21] Within each of these classes no ranking should be published.

The steps of the ranking would then be much closer to the uncertainty estimate for each country. Given the way the current CPI is used and misused, this might be a more ethical way of presenting the index, as the level of precision reflects the uncertainty better. For most countries, it can be assumed that they belong to the class in which they are ranked, or one class below or above. The few countries with a larger than +/- 1 error estimate can be marked with an asterisk (*) in the table. With a more compact presentation of the 2004 index, as shown in the table, it is more likely that newspapers referring to the index would be able to publish the whole table of countries rather than focus on which countries are marginally better or worse than their own country, which is a common way of presenting the index today.

Even if this suggestion implies that details in the information collected are not to be released, it does not obscure the index, and it does not discourage the use and publishing of information that is actually available.[22] Because the CPI is frequently perceived and used as a true corruption level estimate, it should be considered wrong to rank countries on a decimal scale when the true uncertainty in the estimates is one order of magnitude higher. The change suggested would probably not take away the interest among newspapers in referring to the CPI, but it could take away some of its possible negative consequences. A reduction of precision in the presentation would probably not limit the value of the index when being used for statistical research.

TABLE 1: SUGGESTED PRESENTATION OF THE CPI

CPI	Ranking 2004, Countries (Listed in alphabetical order)
10	Denmark, Finland, Iceland, New Zealand
9	Australia, Canada, Netherlands, Norway, Singapore, Sweden, Switzerland, UK
8	Austria, Belgium, Germany, Hong Kong, Ireland, Luxembourg, USA
7	Barbados, Chile, France, Japan, Malta*, Spain
6	Bahrain, Botswana, Estonia, Israel, Oman, Portugal, Slovenia, Taiwan, Uruguay, UAE*
5	Cyprus, Costa Rica, Hungary, Italy, Jordan, Kuwait, Lithuania, Malaysia, Qatar, South Africa, South Korea, Tunisia
4	Belize, Bulgaria, Brazil, Colombia, Croatia, Cuba*, Czech Republic, El Salvador, Ghana, Greece, Latvia, Mauritius, Mexico, Namibia, Panama, Peru, Poland, Seychelles, Slovakia, Sri Lanka, Suriname*, Thailand, Trinidad and Tobago
3	Albania, Algeria, Argentina, Armenia, Belarus*, Benin, Bosnia and Herzegovina, China, Dominican Republic, Egypt, Eritrea, Gabon, Gambia, India, Iran, Jamaica, Lebanon, Libya, Macedonia, Madagascar, Malawi, Mali, Morocco, Mongolia, Mozambique, Nepal, Nicaragua, Palestinian Authority, Papua New Guinea, Philippines, Romania, Russia, Saudi Arabia, Senegal, Serbia and Montenegro, Tanzania, Turkey, Uganda, Vietnam, Zambia
2	Angola, Azerbaijan, Bangladesh, Bolivia, Cameroon, Chad, Congo (Dem. Rep.), Cote d'Ivoîre, Ecuador, Ethiopia, Georgia, Guatemala, Haiti, Honduras, Indonesia, Iraq, Kazakhstan, Kenya, Kyrgyzstan, Moldova, Myanmar, Niger, Nigeria, Pakistan, Paraguay, Sierra Leone, Sudan, Tajikistan, Turkmenistan, Ukraine, Uzbekistan, Venezuela, Yemen, Congo (Rep. of), Zimbabwe

* For these countries the uncertainty in the estimate is more than +/- 1

[21] One intuitive solution could be a categorization in groups that do not overlap in their standard deviation. However, the standard deviations are too large for this approach, and there will always be overlap between the groups.

[22] A leap from one stage to another will perhaps appear larger with this suggestion. Some countries will be closer to the border of their category than others, and the difference between Zambia and Angola, for instance, will seem to be larger than it perhaps is. It is therefore important to emphasize that each country is estimated to belong to the class in which it is placed, or one class above or one below. The countries with an asterisk can even belong to two classes up or down, given the estimated error band.

3.2 Increase the CPI's value as an anti-corruption tool

A challenge in present anti-corruption work is to ensure the enforcement of new international conventions. This challenge requires: (1) actual cooperation across countries to enable better control of economic crime, and (2) incentives for governments to actually investigate and prosecute "their own" companies for bribery of public officials in foreign countries (even if the offences have helped them obtain large contracts with an impact on the trade balance). In a globalized world we need to evaluate governments not only by their domestic performance but also by their cross-border achievements. A corruption ranking should ideally include also estimates of the conduct of representatives of governments and countries, individuals or firms when they operate internationally. Separate information about national levels would still be included. However, a CPI ranking of countries with an international aspect included could make a difference in several ways:

(i) Governments would get a poorer rating if "their" companies were perceived to be taking part in cross-border bribery, or if their politicians appeared to be applying political pressure, of the kind mentioned in Section 2.2, to obtain political or industrial benefits. Governments' incentives to ensure honest conduct outside their own borders would perhaps be somewhat strengthened.[23]

(ii) The problem of variation across countries in their willingness to sign, implement or enforce the OECD anti-bribery convention would be reduced. Companies from countries without this judicial improvement in place may now consider it a benefit to be able to operate without this restriction.[24] Such a CPI change would perhaps reduce the difference between exporters in this sense, because countries would be rated independently of their governments' attitude to this OECD convention.

(iii) It would encourage better consistency in the foreign politics of rich countries which operate with corruption control as one condition for development aid. The situation now is usually that a donor government which finds a certain country too corrupt and therefore ineligible to receive financial assistance, at the same time finds it unproblematic that "their" companies conduct trade or investment in the same poor country. When this trade leads the poor aid-dependent country to receive tax revenues which by far exceed the amounts that it is relevant to supply in the form of aid, the policy appears somewhat inconsistent. This inconsistency is even more apparent in cases where the exporting firms are state-owned. Trade and investment are crucial in economic development, and should not be hindered by these aspects. Nevertheless, most governments in rich countries may need more encouragement to monitor the ways in which their firms operate in countries where the relevant institutions fail to function in a welfare-enhancing manner.

4. Conclusion

The comments on the composite corruption indices can be clarified by an invented example on intelligence. Assume that we have one survey of mathematical skills in twenty different countries, another one on politicians' abilities to read in fifty countries, a third on language skills in seventy different countries, and a fourth on children's abilities to build Lego castles. Each individual survey may provide important information for its purpose. It is only when we put them all together to rank countries according to the citizens' intelligence level that the difficulties occur. When it comes to

[23] The problem of bribe-offering competitors would be reduced if governments really were to restrict their own companies from offering bribes abroad. In addition, incentives to support international anti-corruption work would be stronger.

[24] See Montigny (2004), who describes this problem by explaining how the OECD convention may function as an obstacle to the development of honest trade in African countries.

corruption rankings, we do not claim that people are stupid, but we do, without reliable information, indicate that they are committing crimes.[25]

There is clearly a need for information on corruption, and Transparency International and the World Bank both make important contributions. The following aspects of composite corruption rankings are problematic, even so. (1) We do not know if the CPI refers to legal or illegal activities; (2) the lack of consensus on the meaning of the term corruption makes it difficult to understand the criteria behind the ranking; (3) the ratio between the different scores has no significance and is not constant; (4) individual perceptions of hidden activities are not reliable and can be systematically biased; (5) the weaknesses are not comprehended by the public and the ranking is generally not referred to with the necessary care; (6) its value for statistical studies is uncertain; (7) its value for poor countries in which corruption is a huge challenge is uncertain.

Given that the practice of corruption rankings probably continues, this paper has presented two proposals about reform of this practice: a reduction in the precision of the CPI, and the inclusion of information about the countries' cross-border achievements. The first suggestion is indeed possible and realistic. The second suggestion, however, is inconsistent with the estimation problems already mentioned, and is proposed mainly to raise the debate. The methodological challenges of the CPI could have been even larger with such aspects included. New underlying surveys would have to be conducted and there would be the additional challenges of controlling for the difference in the extent of trade and sorting out large firms' country of origin.[26] But the number of values associated with the CPI would have been higher.

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[25] This problem is even more relevant for the UN's Human Development Index.

[26] Perhaps the Bribe Payers Index by TI could have been extended, and presented together with the CPI.

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SUMMARY

This paper emphasizes the importance of collecting information on corruption, while still stressing critical aspects of the most applied sources of such information, the cross-country composite corruption indices. Are these indices damaging and misleading or are they informative and useful? The paper points to the implication of the lack of a clear distinction between legal and illegal payments or ways of gaining influence. It summarizes the main limitations of Transparency International's Corruption Perceptions Index (CPI), underscores the problem of expecting perceptions to be reliable, and discusses the problem of incorrect understanding and usage of the index. Publicity does not necessarily mean progress, and the construction of the CPI should be influenced by the way this index is applied by the public. A final question is whether it is possible to increase the CPI's value by creating incentives for states to improve their achievements under, for instance, the OECD anti-bribery convention.

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