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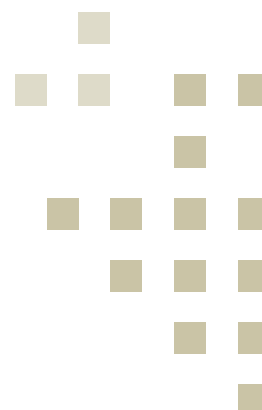
'A house of straw, sticks or bricks'? Some notes on corruption empirics

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Jens Christopher Andvig

[Summary] Corruption has become a fashionable subject the last decade or so. The decades before it was neglected, and the phenomenon itself has been around as long as large-scale organisations. One reason for large shifts in emphasis is the lack of precise knowledge about corruption, particularly at elite level. That admits different views. When both social scientists’ and politicians’ perceptions are interrelated large shifts may be expected. By comparing the major corruption indexes such as Transparency International’s Corruption Perception Indexes to an earlier attempt to expand precise knowledge for policy-making, I argue that they are unable to supply the knowledge needed. The difficulty in gaining information about elite corruption is illustrated by means of simple game theory.

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1. Introduction

A serious problem for anyone who believes that corruption is a major international policy issue today, is that it was not so two decades ago. Despite some evidence to the contrary (Kaufmann et al, 2005), corruption is likely to be a perennial issue, and not likely to change much in seriousness during a decade or two. And if it has, we have no valid instrument to tell whether that impression is fact or fiction. The instruments so far developed for measuring integrity today certainly cannot cope with history. Moreover, given the fragmented kind of data then available even a fairly dramatic increase in corruption incidence may not explain any increased concern. Policymakers and researchers would not know and hardly been able to guess. So how to explain the increased concern?

Maybe a detailed historical explanation linking it to the end of the Cold War, the US Foreign Corrupt Practices Act, and the US's strengthened international position, and so on, would do, but here I will focus on the informational structure of public 'data' on corruption that creates a propagation mechanism that allows the wide swings in the perception of corruption as a policy. The same mechanism creates also one of the most serious problems for the validity of several of the leading research tools, the corruption perception indexes.

2. Corruption concern as an information cascade

Note that corruption is not the only international issue that has come into the forefront of policy attention that is built on information-poor foundations: International terrorism and organized crime are phenomena that have received even more attention. Here too the lack of precise information about vital properties of their workings may

have contributed to the wide swings in the assessments of the dimensions and nature of these issues.¹

The key idea in the following is very simple and inspired by the established economic theory of *information cascades*, originally developed by researchers interested in the workings of financial markets (Bikhchandani et al, 1992) and later developed for the political economy field by Kuran (1995). Put simply, since corrupt transactions (except small-scale transactions in high-frequent corruption surroundings) are kept secret, few receive or emit reliable signals based on their own experience. They are most likely to rely on general opinion expressed by others.

If a few agents who are placed in positions where they are likely to possess the relevant private knowledge (like Wolfensohn in the World Bank), shift from claiming corruption as a non-issue, to an issue of serious concern, other may accept the judgment, and emit signals confirming that judgment to other agents and thereby start a cascade. Hence, both the persistent lack of concern until the 1990s as well as the subsequent rise may up to a point be explained by a kind of informational cascade-like mechanism. Transparency International's perception index itself contributed to this cascade. Since few OECD citizens have reliable private information, and when they have, would rarely emit it, the index itself had strong impact by making corruption something available to public inspection. By constructing numbers the index has made corruption real and in the political domain, and also creating the impression of something possible to control by public policy. Without public numbers corruption may remain private.²

¹ As we will see, agents involved with corrupt transactions - like members of organized crime units - try to keep everything secret, while terrorist organizations, of course, prefer selective publicity. The reason why terrorism in particular has received so huge amount of attention is probably due to the way lack of information had combined with the availability heuristics based on risk perception characteristics of the phenomenon to create what Kuran and Sunstein (1999) have called an availability cascade and an exceptionally strong one.

² Once upon a time business barometers were suspected to have strong impact on the business cycle, but even so, those were composed by variables that would not change value by the very fact that a business barometer value is announced. Moreover, it was not unreasonable to assume that the effects of a forecast was so systematic on the underlying functions simulating the business cycle that one could revise a forecast, knowing its effects so in principle be able to make a correct forecast (Morgenstern, 1928). It is difficult to envision how that could be achieved with a corruption perception index.

However, the same mechanism that has contributed to the impact of particularly the TI perception index on the corruption policy cascade - the strong interaction between agents' perceptions - at the same time raises serious doubts about perception indexes as research tools, and as an instrument for picking up the effects of anti-corruption policies. That is the issue we now turn to.

During the discussion I will more or less implicitly compare the effort in making corruption (and other governance indicators) an observable and quantifiable phenomenon with another great effort in making complex societies amenable to policy control through quantification, national accounting. While this point for comparison may sometimes make me sound critical it also implies that I consider the efforts to be potentially among the most important recent developments in social science that may open up vast new fields of social and economic issues to empirical inquiry.³ The focus is on the information characteristics. The even more important difference in terms of power will not be dealt with here: While it may make sense to convince the economic and political elites to support rational macroeconomic policies, they are likely to be the ones who gain by high-level corruption, their behavior and power is likely to be the main problem in any serious anti-corruption policy.

3. National income statistics and corruption perception index compared

It may sound trivial, but empirical research about corruption can not build on systematic observation of a large number of proven corrupt acts in the same way as empirical research of, let us say, private consumption and the other items of national income statistics:

- (1) The incentives to lie about the basic process are so much stronger.
This is maybe the most important point. Ideally, the data applied in

³ Quite similar developments have taken place in conflict and democracy studies where the need for quantitative indicators have arisen in explaining the causes and consequences of democracies and conflicts by econometric methods. Democracy indexes are the oldest, but share some of the Irish Stew character of the corruption indexes while the conflict indexes are based on more homogeneous observatory materials. Kaufmann et al (2005) collect and process several other governance indicators. I will not try to make a full comparison of the these governance indicators. In various degree they share the weaknesses and the potential usefulness of the corruption indicators, but are related to an exciting expansion of economics research into new fields of theoretical inquiry that has developed a need for an empirical complement. Whether that complement is based on solid ground in the corruption case is the theme of this paper.

research on corruption should be based on direct and first-hand observations of corrupt transactions made by unbiased observers who are familiar with the rules and routines in the sector under scrutiny. More aggregate numbers should then be constructed on the basis of such observations. This cannot happen because only a few such acts may become observable, and researchers will not be the ones to observe them. With respect to private consumption, researchers may initiate budget studies and the results there checked against statistics collected from stores and enterprises. The incentives to lie about the items are normally modest.⁴

- (2) The observations may not be assumed independent of the process of their revelation. That is, individual *i*'s beliefs about the extent of corruption cannot be assumed independent of individual or agency *j*'s report. Here again, the situation is quite different of, for example, the weak or nonexistent feedbacks from published data on private consumption, and the individual *i*'s or *j*'s reports on their consumption, which makes it more plausible that the statistical reports about consumption stay pretty close to the real process.
- (3) The situations where corruption may occur are much more heterogeneous across agents than private consumption and consistent aggregation procedures more difficult to find. Each agent's consumption is made in a similar situation with similar forms of motivation constrained by some form of budget. One agent's consumption means the same as the next one. That implies
- (4) that it is possible to construct meaningful, empirically based aggregates of private consumption based on micro items. While one may discuss in a precise way, for example, whether Paasche or Laspeyre price indexes may be the most appropriate one for aggregating the different items in a consumption bundles to trace increase in aggregate private consumption, no parallels exist for adding up the size of aggregate corruption, and its possible

⁴ Some items such as alcohol consumption may be sensitive. In poor surroundings people may try to hide all kind of luxury consumption not only against neighbours but also against all government authorities including its statistical agencies.

difference across space and time. The reasonable aim of the aggregate will not be so obvious, but at the same time decisive. For example, is aggregate corruption larger in a country where one public procurement decision of 10 billion has been made for 100 million in bribes at a high level compared to a country where 10 000 police official decisions have been influenced by bribes, each of 50? A myriad of aggregation problems of similar kinds will present themselves if serious aggregation of micro-transactions were attempted.

- (5) The aggregation of sub-indexes on which the perception indexes are based, accordingly, are themselves either direct reflection of more or less diffuse aggregates or aggregated in conceptually arbitrary ways for the sub-indexes that are based on some set of (mostly diffuse) micro-transactions.⁵
- (6) With respect to private consumption, each agent's income is likely to have a similar impact. It then makes good sense, given appropriate methods of aggregation, to consider aggregate consumption as a meaningful function of aggregate income. It is difficult to imagine similar functions for aggregate corruption, even if it were composed of meaningful micro-items, given the heterogeneity of the situations of corruptible agents, with the partial exception of signals sent from the top of a national bureaucracy.⁶ Since it is highly unclear what kind of empirical reality the corruption indexes reflect, it is also difficult to tell the meaning of the functions they may be embedded into, either as explanatory or explained variables.

This raises serious a serious problem for a large share of corruption research, I believe. The last decade or so, the number of empirical studies of corruption has increased in about the same rate as theoretical models, taking a definite, quantitative and econometric direction. They have become part of and sustained the corruption

⁵ I will return to the matter of aggregation in somewhat greater detail later.

⁶At this stage it would not help us much since there, as far as I know, is no empirical research available that describe how such signals are transmitted throughout bureaucracy.

policy cascade. However, to repeat my point, since most of this research has applied as explanatory or explained variables precisely these indexes of corruption, it remains quite unclear what these regressions really mean due to the lack of clarity of the corruption variable. Is it mainly what Frisch (1970) once called 'playometrics'⁷ or serious research?

Whatever will be the final verdict of empirical corruption (and much of the other governance) research, we should note at least some forms of progress. While the first corruption indexes were quite simple and their aggregation procedures not so well grounded from a statistical point of view, significant progress has been made in some of the important, technical aspects of their construction.⁸ The questionnaires that in principle should reflect observations better than expert opinions constitute now a larger share of the sub-indexes on which the major indexes are built than before.⁹ Furthermore, the econometric studies have contributed in making corruption a vivid policy issue, producing many interesting and suggestive results and connecting corruption to other important economic and political phenomena. Nevertheless, the empirical *foundation* of corruption research is in many respects still quite weak and hazy despite statistical refinements, a situation which demands exceptional care when evaluating the many econometric results reached in the literature.

Empirical research into corruption is characterised by the paradox of a paucity of few direct observational data and the multitude of regression studies mostly based on

⁷ He wrote: "I have insisted that econometrics must have relevance to concrete realities—otherwise it degenerates into something which is not worthy of the name econometrics, but ought rather to be called playometrics."

⁸ The most informative, technical discussion is still Kaufmann et al (1999a) which explains the World Bank's governance indexes. Kaufmann et al (2003: 32-39) makes a direct comparison with Transparency International's main corruption index. The technical principles which that one is based on at present is explained in recent, yearly 'framework' documents, for example in Lambsdorff (2003). An interesting, somewhat broader, but somewhat looser discussion of these indexes more along the lines we follow here, is Johnston (2000). The econometric reasoning behind the CPI index has also now been more clearly formulated (Lambsdorff, 2003).

⁹ Reading Kaufmann et al (2005) description of the sub-indexes used, about a half is either based on questionnaires that raise fairly concrete questions to samples of businessmen or private households, or with lending experts with fairly concrete tasks where we may assume that they are in positions to observe or discover corrupt transactions. Answers to direct questions about retail corruption such as whether one has been asked for a bribe by a policeman or teacher the last year, probably reflect real situations quite closely. This form of corruption probably correlate with corruption at the higher levels, and may serve as an indicator of it, but here we are on more slippery ground. A systematic, critical exploration of the input to the CPI and WBI indexes according to their declared distance to corruption observables should be made.

perception indexes or other forms of indirect measurements needing a large of disputable assumptions for making the claim that we really are dealing with corruption. Let us now speculate a little bit more about why this is so.

4. The difficulty of direct observation. Definitions

For our purposes here the exact definition of corruption is of no great consequence, but let me put forward the following one:

An act is **corrupt** if a member of an organization uses his position; his rights to make decisions, his access to information, or some other of the resources of the organization, to the advantage of a third party and thereby receives money or other economically valuable goods or services in ways that either are illegal or against the organization's own aims or rules. An act represents **embezzlement** if a member of an organization uses his rights to make decisions, his access to information or some of the other resources of the organization to his own economic advantage, eventually to the advantage of some other members of the organization, in ways that are either illegal or against the organization's own aims or rules. (Andvig, 1995)

Note here first that a corrupt transaction involves some form of rule-breaking behavior. That again implies that it is not possible to look at any set of transactions directly and decide whether it is corrupt or not. It has to be related to a set of rules. When the rules change, the set of possible corrupt transactions also changes. This creates obvious problems both for observation and for comparison. Second, when a corrupt transaction is illegal, but not against an employer's interests both the performer of the transaction and her employer will want to keep it secret. Since she is presumably acting in the outsider's interests, he also wants to keep the transaction secret. Eventual third parties who may be harmed by it, are not likely to know about the corruptness of the transaction. The complexity of proving it as such reduces the risk of external discovery, making the public monitoring agencies likely to discover only a small fraction and to bring an even smaller fraction to court.¹⁰

One should expect that the situation where the insider is doing both something illegal and something against her employer's interest would make for a higher rate of discovery. However even in this case we would expect public secrecy.

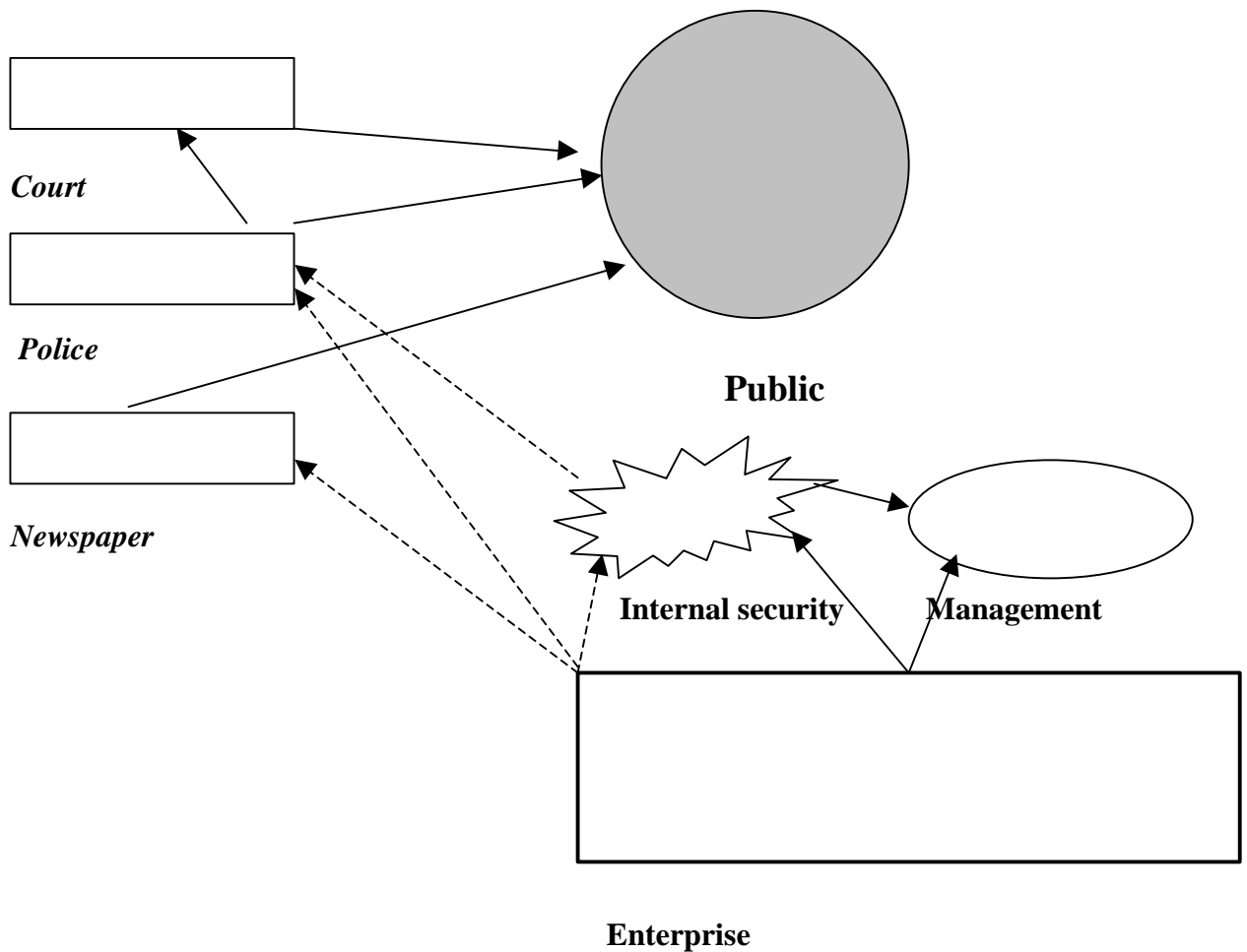
Seen from the point of view of private enterprises the process of revealing any information about corruption has some of the n-person prisoner dilemma

¹⁰ When I was allowed access to an economic crime unit investigating corruption in the Norwegian oil industry reported in Andvig (1995) I discovered that it would not even consider bringing in more than 5 – 10% of the likely cases to court.

characteristics as corruption itself: Since corruption is a type of transaction that will be commonly suspected, and where the public is likely to believe in strong organizational spillovers, if you admit that a corrupt transaction has taken place in your organization while no one else admits corrupt incidences, your organization will appear to be exceptionally corrupt, harming its reputation and its stock values. The costs involved by the public getting to *know* an economic crime are much higher than the immediate costs, empirical research suggests.¹¹

We illustrate some of information channels in the case where a private enterprise is involved in a corrupt transaction:

Figure 1 Stylized corruption information flows



¹¹ Karpoff and Lott (1995) estimate that the public revelation of an economic crime causes on average something between one and five per cent loss in stock values depending on the nature of the crime, on average for the companies of which they had data, roughly fifteen times the value of the direct losses.

The broken arrows indicate whistleblow information, that is, information revealed against the management's knowledge and interests. The unbroken arrows are information that follows line authority. Internal security embraces both auditing and internal security police. Most of the whistleblow information is stored in the different monitoring organizations without the public's knowledge for reasons (to be) outlined. In the diagram the monitoring organizations are not able to collect any information on their own, but rely wholly on informant. This is, of course, extreme, but both the logic of the situation and anecdotal information indicate that only a small fraction of information stored by the external monitors have originated by their own activities.

If everyone openly told about their organization's experiences each story would cause less harm, at the same time as everyone would gain by the more precise knowledge accumulated. But even in this open situation it will normally be more profitable not to tell, since you then could harvest the increased knowledge at the same time as you still would have a reputation to protect. Hence, we must expect the low information equilibrium to be a stable one. However, shocks may occur where suddenly the agents may be more willing to reveal their knowledge, since it will cost less to tell if others are telling. Hence, we may observe situations where large shifts in the rate of public revelation of frequencies may occur with small changes in the underlying real incidence of corrupt transactions. While the public in general is aware of this situation, more frequent revelations will probably also make the public *perceive* the real incidence as increasing, although the evidence here is somewhat mixed.

We may illustrate some of the possibilities here with two simple games, both making secrecy the dominant strategy. They deal with the unbroken arrows, and we will not try to explore whistleblowers' behavior here. Let us consider a situation where two organizations, EXXON and BP, have discovered that one of their employees have been bribed in a bidding process.¹² Unaware by the other, the same information broker has been involved in both bribe transactions. The broker knows the business and will continue if unpunished.

¹² When they are in supply situations and are active bribers themselves the incentives for keeping secrecy would be even stronger. In that case no unbroken arrow will go from the management to the police.

Table 1. EXXON – BP ‘s Prisoner Dilemma game

		<i>EXXON</i>	
		Go Public	Stay secret
<i>BP</i>	Go Public	{ 2 , 2 }	{ - 1 , 3 }
	Stay Secret	{ 3 , - 1 }	{ 0 , 0 }

As is conventional, the first number in each pair represents the utility of the row player (BP) and the second the utility of the column player (EXXON). In this first, prisoners’ dilemma, game it will be of the advantage of both firms to go public, compared to the situation where no one does (that is to go to the police, and/or share the information with the security service of the other organization). The gain by the increased probability of catching the information broker by sharing the information is not sufficiently large to compensate for the negative publicity, however, so each company wants the other to go to the public and keep its own corruption secret. If their information emitting stays decentralized, both will choose to keep their corruption cases secret. However, if the authorities somehow might force such cooperation, both companies will gain, and the information will reach the public (or at

least the relevant public officials).¹³ In the second situation - being somewhat imprecise - corruption information is even less likely to reach the public. Here the best situation for both companies is when they both keep their corruption cases secret. Negative reputation spillovers to the industry in general may be so strong that it does not compensate for the value of the potential information broker catch.¹⁴

Table 2. EXXON – BP’s Industry reputation- game

		EXXON	
		Go Public	Stay Secret
BP	Go Public	{ 1 , 1 }	{ - 1 , 2 }
	Stay Secret	{ 2 , -1 }	{ 3 , 3 }

¹³ In the early 1990s four leading oil companies tried to institutionalise such cooperation in the early 1990s (see Andvig, 1995), but that cooperation broke down. The degree of secrecy that private companies prefer and are allowed to possess is surprising and probably often not to their own advantage.

¹⁴ It is, of course, possible that the enterprises may be more willing to emit information than outlined in these games. An assurance or stag hunt game is one possibility: Each want to tell if the other does, but if he doesn't, the other would not do so either. The preceding analysis is inspired by a meeting held by the Norwegian Association of Industries in December 2000 where every manager expressed a deep concern about the grave danger of corruption in general at the same time as each company told that they had hardly experienced corruption themselves. Furthermore each and every one had created safeguards that made it highly unlikely to happen. The obvious question to ask how could then corruption be a serious issue?

Hence, on the basis of reasonable analyses of the generation of corruption data, we would expect that concrete (higher-level) corruption stories will be scarce everywhere, but in countries with few revelations the rate of revelations to actual incidence will be even lower. The perceived rate is likely to follow the revealed rate, and hence, we will expect the perceived differences between high and low corruption rate countries to exaggerate the difference in actual rates, but we cannot be sure since we have no way to know the actual rates. It is even possible that the incentives of staying clean may become stronger when the number of revealed cases increases, creating a tendency to underreport even more strongly.

In any case, the forms of social interaction connecting actual to revealed cases are likely to be so complex and many-sided that we may not expect the number of revealed cases to be a simple function of actual cases. At the very least we need to know more about whistleblowing behavior. Neither should we expect the perceived levels of corruption to be any simple function of the number of revealed and even less of the number of actual cases.

Before I go into the policy consequences of dealing with a research subject where truthful information is so scarce and the incentives for deliberate deception are so strong, let us see some of the ways this scarcity has been handled in research.

5. Ways to handle the scarcity of truthful information – a brief overview

5.1 Direct information and information through front-line units

Social scientists have rarely been in a position where they have been able to observe corrupt transactions first hand and in a systematic way. The exception is, of course, retail corruption where we have a number of surveys. Nevertheless, we have a few *case studies* of corruption such as Wade's (1982) study of corruption in a large irrigation organization in South India. It displays some of the general insights to be gained from a case study. He is able to show how positions were bought and sold in a large irrigation organization, and how the income from the sales were collected and partly transferred up and fed party organizations. One of the reasons why Wade was able to get such direct access to this information was that he had gone through the same education – civil engineering - as his informants.

In countries with honest judiciaries, the most reliable information about corruption is found in *court* cases. Courts are spending considerable resources on establishing which transaction has in fact taken place, and to judge whether they have actually been corrupt. Moreover, the courts have rights to receive relevant information and means of punishment if not given, that no social scientist possess. Furthermore they often have disposable larger apparatuses for collecting information than most researchers. Court cases may then clarify important mechanisms through which corrupt transactions actually are made. However, the threat of punishment may also keep some information buried that could otherwise be freely given.

For assessments of frequency and extensiveness, a major problem with court cases is that they are so few, compared to the underlying number of corrupt acts. Moreover, their number are likely to be strongly influenced by the relevant judicial and police capacities. While always few compared to the actual occurrence, some kind of corrupt transaction may be more easily revealed, or the courts may have unequal incentives for bringing the different kinds of corrupt transactions to court. The extreme case here is when a power shift has occurred and the new rulers want to bring the old ones (often rightfully) to court without doing the same for the new rulers when they are acting corruptly. They can neither be used as indicator of sector occurrences nor of general corruption frequency. For similar reasons court data are difficult to use for cross-country comparisons. They are likely to tell more about political priorities or the efficiency of judiciaries and police than about the underlying problem of corruption.

Such data on corruption have nevertheless been collected on an international basis and some efforts have been made to make them comparable across countries, for instance by the *Crime Prevention and Criminal Justice Division* of the United Nations Office in Vienna (United Nations 1999). However, the fact that Singapore and Hong Kong have exceptionally high conviction rates confirms the suspicion that data from courts cases on corruption, when aggregated, are telling more about judiciary efficiency than

about corruption frequencies.¹⁵ They do, nevertheless, bring interesting and often very detailed descriptions of the institutional and motivational mechanisms involved.¹⁶

In addition to the court cases, the *police* and other investigative units, mainly private investigation and auditing units of larger firms, are collecting considerable information about instances of corrupt transactions, also when the information may not be precise enough to win court cases or to fire employees. The quality of this unused information is highly variable, ranging from cases almost ready to be brought to court, to mere rumors.¹⁷ In some cases this information may be sufficiently extensive to construct risk patterns for entire sectors, but it will often be biased in the sense that active, strongly motivated police units will tend to exaggerate the number and danger of the crooks they are hunting.

Investigative journalists are also in several ways in a better position to collect data than social scientists. The higher public exposure of journalists gives them a larger supply of informants. They will often have to handle the data carefully, since good stories demand the naming of actors with the obvious possibility of harming innocent individuals. The risk of being sued necessitates caution. Like the police, journalists possess much surplus information that they cannot use. This means that stories from the media may become important sources of information also for social science research on corruption when it comes to establishing facts, including the discovery of

¹⁵ This is a general problem with most criminal statistics. Goel and Nelson (1998) used cross-state (in the U.S.) co-variations in conviction rates of public officials for office abuse, and real per capita public spending as background variables to argue that higher levels of public spending will give rise to higher incidences of corruption. However, as argued by Lambsdorff (1999a), the explanation may rather be that higher conviction rates are caused by more resources spent on investigation on corruption when public expenditures increase in general than by the increased prospects for abusing of public money that may follow from larger budgets. Glaeser and Falk (2004) make systematic use of the regional distribution of federal corruption conviction rates over a long period in the US history to explore whether education or income growth may have impact.

¹⁶ The bribing mechanism in the bidding process in the North sea oil industry was laid bare in a single court case. See Andvig (1995)

¹⁷ Andvig (1995) employs information of this kind in a study of corruption in the Norwegian and British oil industry, and van Deuyne (1996) has used systematic police information in a mapping of Dutch organised crime industry, its bribing included.

new methods of implementing corrupt transactions.¹⁸ Against all this, their commercial interests may skew their stories.

The media are also important subjects of research on corruption, mainly for political scientists. Some forms of corruption may be considered a regular source of political scandals, and the political effects may often be quite similar to the publication of private misbehavior of politicians or their families. The media are important not only in bringing forward facts about corruption, but also in forming public and scientific perceptions of it. Moreover, the media are to a large extent setting the stage for determining the likely political consequences of revealed corruption scandals.

Like court decisions, media sources have their evident biases when comparing corrupt transactions across countries and across time. Firstly, the media will tend to give priority to the more spectacular stories, paying less attention to the less dramatic but more common practices of corruption. Second, and more important, the number of stories on corruption reaching the public are likely to be determined not only by how many stories that are taking place, but also by the degree of press freedom, the market for corruption stories, the journalistic professionalism and resources available, and various kinds of journalistic bandwagon effects. Very aggressive investigative journalism of a free press may paradoxically cause the authorities to take precautions, making the conditions for whistleblowers more difficult and thereby reduce the number of published cases.

Media stories are likely to have exceptionally strong effects on the so far most used instrument for indirect information, the perception indexes.¹⁹ Sometimes it may be practically impossible to determine whether a perception of increasing corruption

¹⁸ One of the leading researchers in the corruption field, Alan Doig, started out from investigative journalism. He has established one of the few international research centres on corruption at Liverpool Business School. An influential monograph, relying to a large degree on facts collected by investigative journalists, is Doig (1984). In their large study of corruption in America the Goldin and Glaeser research group makes also extensive and systematic use of newspaper data

¹⁹ Cábelcova (2001) reports that in a set of respondents in Ukraine from 1998, 49% answered that they had used the press as a source of information for their assessment of corruption, 66% the TV and 28% the radio. Only 25% used personal experience. Stoyanov (at IV Global Forum, 2005) presented data that showed extensive fluctuations in the number of newspaper stories about corruption in Bulgaria since 2000 at the same time as the perceived level of corruption appears constant, interpreting the result to show that perceived corruption was uninfluenced by the media, an expression of a moral constant. Bringing in lags makes this result less striking, however.

levels worldwide is based on facts or not, because the main sources used are likely to be so strongly influenced by shifts in media attention and public opinion. As far as we know, unlike the case of criminal convictions for corruption, no authoritative international counting of media stories has been made so far, but a few attempts at the national level have been performed.²⁰

It is clear that the actual occurrences of discovered and provable corrupt acts passing courts, media and the few instances of participatory research are too few in most countries to constitute a representative sample of the underlying corrupt transactions. To create patterns and analyses, researchers have to bring in information that is relatively unreliable, and then try to process it and make explicit the large and hardly determinable margins of error in the field. Or, alternatively, researchers can decide to let the uncertain and imprecise information about patterns pass, and consider it as not amenable to serious research.

Until the middle of the 1970s, the last strategy has been the dominant one. Gunnar Myrdal was an important exception. He urged (Myrdal, 1968: 940-42) that: “ the folklore of corruption embodies important social facts worth intensive research in their own right. ...The beliefs about corruption ... are easily observed and analysed, and this folklore has a crucial bearing on .. conduct. The data [on folklore], and the process of collecting them, should give clues for the further investigation of the facts of actual corruption.” We had to wait until the mid-1990s before this research program was taken seriously, however. It was then given a quantitative and comparative twist, probably not imagined by Myrdal. That again had many advantages, but one serious drawback. The focus on quantities made it easier to forget that the basic data were still folklore and to rephrase folklore as facts. The outcome was that a large number of econometric studies have been published since then, the mid 1990s, based upon several indexes of aggregate country *perceived* levels of

²⁰ For a rather rough report on Canadian data which reports media coverage on different types of economic crime, including corruption see Beare and Ronderos (2001). While the number of cases reported on corruption is lower than most other types of economic crime, more than 100 cases are reported each year indicating that quantitative exploration of newspaper reports may prove a fruitful line of empirical inquiry. As far as I know few systematic explorations of the vulnerability of the perception indexes to public scandals have been undertaken. In their large project on the history of U.S corruption Glaeser, Goldin et al (2005) make extensive use of media data.

corruption.²¹ The first and probably most influential one was Mauro (1995), who brought corruption into the renewed field of economic growth studies among economists. It was an econometric study of the effects of country corruption level on the growth rate, and the results indicated that there was indeed a significant negative impact. The study was based on data on general country corruption levels. What kind of data had Mauro been able to find?

5.2 Corruption folklore and perception indexes

Mauro (1995) used mainly data from a commercial organization, *Business International* (BI), which in 1980 made an extensive survey of a large number of commercial and political risk factors, including corruption, for 52 countries, among these several developing countries. *Business International* had an international network of correspondents (journalists, country specialists, and international business people) who were asked about whether and to what extent business transactions in the country in question involved corruption or questionable payments..

In fact, *Business International* was not the only organization that tried to monitor where international businesses have to expect the most extensive or frequent bribe demands. Quite a number of both profit and non-profit organizations constructed similar indexes. Today *Transparency International's* "Corruption Perception Index" (CPI) is still the best known and the one most often used both in research and in the public debate. Another important index is the World Bank Institute's "control of corruption" variable (WBI-index).²² Unlike most of the commercial indexes they are handed out free of charge.

As we have noted the basic ideas of both indexes are quite similar, and they are even composed of many of the same sub-indexes and produce very similar judgments. Their correlation is above 0.9 (Kaufmann et al 2003). Both are constructed as a weighted average of different indexes from several different organizations. The majority of these indexes are based on fairly vague and general questions about the

²¹ Most researchers, of course, admit when formulating their regression set-up that their corruption variable is to a large extent based on perceptions, but then start to interpret the results as if it is actual corruption that was embedded in the regression equations. Cábencova (2001) again is an exception

²² The most detailed explanation of the statistical method behind the WBI- index is in Kaufmann et al (1999), an updated version is Kaufmann et al (2005). The most recent description of CPI is Lambsdorff (2004).

level or frequency of corruption perceived either by experts or business managers. Some of the sub-indexes are based upon expert opinions with inbuilt checks to ensure cross-country consistency. Other are mainly based on questionnaires sent to middle- and high-level management of either international or local firms with only vague and general questions about corruption. A few ask about their perception of more detailed situations.²³ Equally few ask the respondents directly about their own experience of corruption. Due to its method of aggregation the WBI-index has been able to include some of the recent regional surveys (such as the Latino and Afro- barometers) that ask respondents about their direct experience. But still they both remain largely a “poll of polls”, reflecting the impressions of business people and risk analysts who have been surveyed in a variety of ways.

The reason why they both aggregate the different sub-indexes, is to increase the statistical precision, to reduce the statistical noise of the corruption indicator. A composite index would be the statistically most robust means of measuring perceptions of corruption. This may be questioned in different ways. For one thing, each of the other surveys uses different sampling frames and varying methodologies. The definition of the corruption concept also varies between the surveys. Thus, we may question whether the surveys cover the same phenomenon. Are the different questions asked by the various organizations, really the same? In terms of methodology, the most striking difference is that WBI started out with an explicit model while the CPI in the beginning was constructed by some kind of trial and error procedure, and then not completely transparent. Partly by being challenged by the Kaufmann group this has changed.

Another interesting difference between the CPI and WBI approach – if I have understood the procedures correctly - is that while CPI assumes that each sub-index is equally precise, but that their common precision may vary across country, WBI allows the sub-indexes degree of precision to vary, but assume that each hit every country with the same degree of precision. This makes it easier to link sub-indexes

²³ Several of the World Bank sub-indexes such as the BEEPS survey ask the management respondents about how common corruption is in your branch of activity and interpret that as a hidden statement of what it does itself. That is, the interpretation assumes that one has caught corruption observed. This is clearly not a valid interpretation. Although closer to something observable, a questionnaire of this kind is still confined to a study of Myrdal’s folklore of corruption world.

with few country observations to the aggregate. Another advantage of WBI, Kaufmann et al (1999) argue, is that it makes the weights endogenous so that the sub-indexes that inter-correlate more strongly with the others, are ascribed a higher weight. But if this really is to be an advantage, a crucial assumption of the aggregation procedure should hold: The error term of each index observation should be stochastically independent of the others.²⁴ We have already seen that there are theoretical reasons why the agents directly observing corrupt transactions will be influenced by their social interaction when emitting public corruption signals.

How reasonable is it that the strong correlation between the sub-indexes is due to correlation of errors, and not to independent observations of the same government characteristics? Several of the sub-indicators with the strongest inter-correlation are based on respondents' answers to very general and vague questions about their perceptions of corruption levels in country A, B or C. The questions are not leading the respondents to focus on their own experience, if they have any. At least in countries where the citizens have no daily, individual experience of corruption, the assessments have to be based on the process through which information about corruption reach the public domain. How is that process?

As far as I know, little precise, empirically based knowledge is here available. As a first approximation, however, I will expect strong correlation and spillover effects: The experts read the same reports and gauge other experts' statements. Since the assessments are not likely to be based on clear individual experience, when expert X claims corruption in 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 his. Informational cascades may, as we have argued, easily develop in this context.²⁵ The fact that the TI index in particular is widely published, reinforces the argument. The case of expatriate businessmen is somewhat different, but they are not likely to base their assessments to any large extent on their own, independent experience either. Much will be based upon other businessmen's communication. The degree to which

²⁴ While Kaufmann et al (1999) admitted from the start at the assumption of stochastic independence might be unrealistic, they did not consider the problem as crucial, because it would only reinforce their polemics against the CPI' use of the index in performing country ranks. With dependence the variance of the index would increase and make such rankings even more doubtful.

²⁵ Many of the conditions for of such cascades to develop are fulfilled in this case (see, for example, Bikhchandani, et al., 1992).

that will contain private information, will at best depend on how much private communication other expatriates reveal.

This problem is indeed quite critical for the aggregation procedure. For example, one of the arguments for aggregating the sub-indexes is that they are strongly inter-correlated and therefore must show the same phenomenon as indicated in the following table (BI; ICRG and Gallup are the subindexes):

Table 3. Correlation coefficients between different perceived corruption ratings

	CPI 1996	CPI 1997	CPI 1998	BI (early 1980s)	ICRG (for the 1980s)	Gallup International 1997
CPI 1996	1.000	0.9689	0.9663	0.8739	0.8844	0.7719
CPI 1997		1.000	0.9880	0.8517	0.8828	0.8403
CPI 1998			1.000	0.8044	0.8785	0.8424
BI (early 1980s)				1.000	0.8512	0.6471
ICRG (for 1980s)					1.000	0.7244

Sources: Transparency International and Treisman (2000)

But what if the inter-correlation may be ascribed social interaction between experts and between businessmen and/or their cross-group interaction?

The fundamental prior of both the CPI and WBI indexes is that all sub-indexes approximates the same underlying corruption variable with an error. By aggregating, this error is reduced. This interpretation demands a leap of faith. A more reasonable prior would be, I believe, to consider each as a mixture of at least three components, one indicating a measure of social interaction within the international community, the second component a measure of corruption, and a third a proxy for social interaction within the single country.

5.3 Closer to the world of observation, but still folklore: Detailed questionnaires

The work under the auspices of the World Bank since 1996 to develop more detailed and focused information about different aspects corruption by means of questionnaires addressed to businessmen and officials, is a most interesting and

important expansions of statistical information. So far, the World Bank has developed several, and the *European Bank for Reconstruction and Development* (EBRD) has also become involved. In these, enterprises are asked about how large a share of their expenditures is paid out in bribes, whether they try to bribe lawmakers to give advantageous laws, whether they pay out bribes to win single contracts, and so on. Furthermore, detailed questions about whether the bribed officials fulfill their promises, whether the outcome is predictable, etc. are included.²⁶ One such questionnaire was made for the 1997 *World Development Report*, and a considerably improved version is the 1999 Business Environment and Enterprise Performance Survey (BEEPS). An interesting set of results for the transition countries are reported (Hellman et al 2000a). The results, however, appear promising in the sense that new opportunities for gaining empirical insight into corruption are opening up. For example, it appears likely that the firm-level effects on bribes paid for gaining public procurement contracts become quite different when lawmakers are for sale compared to situations when they are not.²⁷

In 2002 the World Bank /EBRD made a new BEEPS questionnaire with many of the 1999 questions, and adding some new ones, inter alia, specifying new influence variables (Hellman and Kaufmann, 2003). Compared with the aggregate corruption indexes the BEEPS questionnaires both present firm-level data, and are able to go beyond the ordinal number characteristics of the aggregate corruption perception indexes by asking questions around the size of bribes. Moreover, the set of questions forces the respondents to focus on more concrete corrupt situations and, hence, they are less likely to only respond on the basis of loose impressions. The self-confident (and maybe deserved) feeling of being on an exceptionally promising track of empirical research into an area that has proved difficult to penetrate, is reflected in Kaufmann's (2003a) strong headline: "The Power of Data: Governance Can be

²⁶ The direct, firm-level data from the World Bank are briefly presented in Wei (2000) and applied in Kaufmann and Wei (1999). Most of the data published have so far focused on the so-called transition countries. Svensson (2000), however, applies firm-level data from Uganda, based on the Ugandan Industrial Enterprise Survey, initiated by the World Bank but implemented by the Ugandan Manufacturers Association.

²⁷ A presentation of the recent questionnaire is given in Hellman et al (2000a), and an example of its results (the results to a question of the role of political corruption in transition countries) is given in Hellman et al. (2000b). These data are very valuable to researchers, who, in general, are unable to gather this kind of material individually. Most researchers lack the resources and, more importantly, the authority and legitimacy and funds needed to get a questionnaire like this developed and answered. An earlier report based on this methodology, applied at the global level, is Brunetti et al. (1997).

Measured, Monitored, and Rigorously Analyzed.” On the basis of that work it is now possible to construct reasonably comparable (across countries) measures of different forms of corruption, whether corrupt deals are honored, and so on, for a large and increasing number of countries, all seen from the enterprises’ point of view. Nevertheless, when compared the pictures that emerge about the different countries appear quite confusing and often delinked from what is known about institutional and economic fundamentals of the countries in question.

With a few exceptions, most of the micro-based research into different, decomposed aspects of corruption has relied on the more widely collected business questionnaire data, such as the World Business Environment Survey (WBES). Sensibly, in order to gain answers from the enterprises about their experience of sensitive corruption, the questions had to be “phrased indirectly about the corruption faced by ‘firms in your line of business’” (Hellman et al., 2000: 20). For example, questions have been raised about how much of the income is paid in bribes, how often are bribes paid to gain a public procurement contract, etc. (“in your line of business”). While producing interesting results closer to observed reality than vague questions about how extensive corruption is in country A compared to country B, it is still an answer to a question about how the agents perceive their surroundings, not about their own direct experience. When Hellman et al. in a number of publications claim that their answers about the general conditions in the industry is an indirect way to report their own experience, they over-interpret the answers. The respondents are more likely simply to answer the question, that is, to report their perceptions of the corruption state in their industry. Despite the focus on concrete situations in the questions, this is still not the same as reporting experience.

An indication of how their interpretation may reach counter-intuitive results is the World Bank group’s paper on multinational companies’ behavior in transition countries (Hellman et al., 2002) where they find that multinational enterprises from low-corruption countries behave as, or even more, corruptly as the locals even in the most corrupt countries. That they perceive the state of their industry as even more corrupt than the locals is no wonder. Their result is counter-intuitive given the larger reputation costs of multinational companies, if caught.

For some countries the information about industry and office perceptions may be compared with the private households' and public officials' experience or perceptions in so-called diagnostic surveys.²⁸ In another line of research the World Bank has focused on the different branches of public government and asked different groups of officials about their perception and experience of governance issues including corruption.²⁹ For a few Latin American countries Seligson (2002, 2003) has also collected a set of corruption data where households are asked about their direct experience. However, it still is the fact that reported experience is almost impossible to get access to through questionnaires, except for petty corruption in highly corrupt countries.

5.4 The hunt for indirect real-economic indicators

Recently a number of studies have been made where we may deduce something about the seriousness of corruption on the basis of data from the real economy: Public expenditure tracking (Uganda, Reinikka and Svensson) Expense versus output in public projects (Italy by Golden and Picci), relative size of underground economy (Andvig for Azerbaijan,) and corrupt-like scandals (Andersson for Sweden), number of inhability cases (Smith for Oslo, Norway) and so on. [a useful, brief discussion is in Rose-Ackerman 2004] . It will be misleading to assume that relying on observables, this research may come closer to observed *corruption* and having smaller degrees of error than research working through *perceived* levels of corruption. A number of often drastic assumptions which validity may not be empirically scrutinized, are often needed to make these variables to tell stories about corruption..

5.5 The detour to observations through the laboratory

Recently several experiments of constructed economic interaction intended to simulate real life corruption characteristics have been made in laboratory settings. The behavior is observed, recorded and statistically analyzed. The use of laboratory has opened up new and in one sense direct observations of corrupt behavior. Moreover, by varying the experimental conditions it is possible to establish more direct ties to

²⁸ See: <http://www.worldbank.org/wbi/governance/capacitybuild/diagnostics.html>

²⁹ In the case of Bolivia, see Manning et al. (2000). So far, only a few countries are covered. The project is closed.

basic microeconomic theory of corruption. Several interesting studies have been made.

For example, in Abbink, Irlenbusch and Renner (2002) the basic corruption dyad is constructed as a trust game where the potential briber, the 'firm', has to make an initial outlay, a transfer fee, if it wants to bribe the other member of the dyad, 'the official'. The 'official' may choose one of two alternatives where the corrupt alternative will give the firm a large profit, but the official a small loss. To induce the official to choose its more profitable option, the firm may perform an actual transfer where the official receive three times as much as the firm sacrifices in that trial of the experiment. The official may accept the transfer, but still choose the non-corrupt alternative. Hence, we have a trust game structure. This set-up may then be varied: A large, exogenous, but low probability punishment, simulating conditions in low corruption societies, was shown to have surprisingly strong effects in preventing corrupt deals. Rotation of officials, that is that the same official was not allowed to make many plays with the same firm, had also strong preventive effects (Abbink, 2000b) while introducing harmful effects on participants outside the dyad had only weak effects. Surprisingly weak effects were also the outcome when the experiment was explicitly framed as simulating corruption (Abbink and Hennig-Schmidt, 2002).

While the laboratory situation allows a study of the specifics of a type of corrupt transaction, this very specificity is one of several reasons why it is necessary to be careful when applying the results to real-life situations. For example, when the rotation of officials had so strong preventive effect in the Abbink experiment, it is probably explained by the trust-game formulation, that the officials may catch the bribe without delivering the corrupt result. That is also the case in many real-life situations, but in many other situations it is impossible to receive the transfer and not deliver. In such situations rotation may not have strong effects.

More generally, the individuals who participate in the laboratory know they are acting in a laboratory, not in real life, so in this sense all corruption experience collected there is only an indirect indicator of corrupt transactions in real life. At the very least, what the subjects do in the laboratory is not illegal. The last fact makes it even more difficult to use laboratory evidence than in other forms of economic experience at the

same time as the difficulty of collecting direct experience makes it potentially more useful. We should add that laboratory research simulating criminal economic behavior may be more ethically demanding than most other forms of such research. The subjects might lose self-esteem discovering that they have in fact accepted a bribe. This ethical dimension has not received sufficient attention in economic laboratory research, but is routine in experimental psychology, although here unethical research may often be observed (Bok, 1978).

5.6. Mr. Poirot vs. Mr. Marlowe: The approach of action research

Most social science research apply the method of Mr. Poirot : to observe and deduct. However, a few attempts to apply the method of Mr. Marlowe have been made: To inject noise into the social system studied and stir it through their own actions in order to identify forces invisible when it is in equilibrium.

Partly inspired by an older Scandinavian-based action research approach,³⁰ new attempts have been made to combine questionnaires addressed to local leaders and to the general public with sets of public meetings where issues of corruption are brought up. From a research point of view, the advantage is that publicity may make respondents more interested in answering and less afraid of exposing local corruption. In addition, public attention and concern may create changes in public policies as well as ignite a process of anti-corruption efforts, which may in itself bring forward new data about the 'where, how and why' of corruption in the country in question.

A clear exposition of the action research approach is found in Langseth et al. (1997). Furthermore, an interesting collection of data created by this approach is found in *Uganda National Integrity Survey 1998*. While initiated by the World Bank, like the data collection referred to in section 3.3, *Transparency International*, and several multilateral and national aid organizations have embraced the method.

The method has also some obvious weaknesses, however. The statistical validity may be questioned when the answers cannot be considered statistically independent as they

³⁰ Originally action research focused on intra-organisational problems of work-organisations. The basic idea from a research point of view is that by initiating changes and record the effects researchers may gain information otherwise not produced. In addition, researchers may become social activists and achieve desirable results through their work. Needless to add, difficult role conflicts may arise.

become part of a public campaign where emotions are stirred. Valuable data about high level (political) corruption can only rarely be brought forward by this action research approach, since the answers generated are based on or biased towards rumors rather than direct observation.

The method has so far, however, been able to generate data about forms of corruption that have high public visibility such as the police and judiciary, the school and health systems, and in some cases also local road construction. The method also has some potential in exposing more complex forms of corruption if it is brought into its original intra-organizational setting and thereby exposing intra-organizational problems for public discussion. The major attraction of the method for researchers and sponsors is the possibility it offers to kill two birds with one stone: to do research on corruption and fight it at the same time.

Summing up this section, researchers have tried many ways to circumvent the basic difficulty in empirical corruption research: The scarcity of direct, relevant observations. Despite many serious efforts of which the perception indexes have been the most influential, I believe we still are missing that bridge that may lead from the observables to the kinds of corrupt behavior we want research and influence. The corruption perception approach has until now mainly consisted in a quantification and indexation of rather vague and loosely structured conceptions of corruption.

At one hand this implies, I believe, that all the impressive results from the growing number of econometric work based on these indexes must be considered to be more preliminary than normal.³¹ Here we may hope that the data collection based on processes closer to observables that has been initiated by the World Bank (reported

³¹ Here I should add that it may also be premature to *dismiss* their value. Mocan (2004) gets a fairly good correspondence between the aggregate perception levels and the actual corruption as measured by his aggregation procedures based on the micro-data (on petty corruption from the international Crime Victimization Surveys (ICVS). The relationship disappears, however, when a variable meant to indicate the quality of institutions are included. Abramo (2005) achieves little correspondence, but a number of tricky and interesting results when he tries to relate the observables and the perception variables in the latest (December 2004) TI corruption barometer, but some of the results may be driven by the noise in the observables in that barometer (see the appendix.). Cábeková (2001) get better and more plausible relationships for a set of micro-data from Ukraine than the ones that may be dug out from the barometer. The systematic study of relationships between perceptions and experiences is clearly another key field for further research. As mentioned above, Stoyanov (2005) reaches more pessimistic results that imply that perception data are useless for studies of actual corruption

by Hellman et al 2000a, 2000b) when combined with questionnaires asking direct questions about frequency and size of petty corruption may give rise to more convincing results. Still these move around in the field of data Myrdal dubbed - not in any derogatory way - as the folklore of corruption.

Their shaky bridge to real corruption, makes it difficult and tricky to apply the perception indexes for policy purposes, although this is what recently has happened. Here it doesn't really help to claim that *perceived* corruption may have as strong effects as its actual counterpart. If so, the policy instruments that address perceptions are likely to be different from the ones addressing the real part. For example, if foreign direct investment is more harmed by perceived than real corruption, and the present proposal that aid allocation across the set of the poorest countries should be guided by their status on a set of perceived governance indexes of which the one on corruption is the most important one, the proposal would imply that foreign aid would reinforce the inequality dynamics of the international private investment process. Kaufmann and Kraay (2004) warn against this use of the governance indexes. Their argument is strictly technical, however: Wide confidence levels make them unreliable for the task.

6. The political economy of scarce and unreliable information

An important mechanism that allowed the wide shift in the international opinion about the prevalence and importance of corruption that took place in the early 1990s, was the lack of precise and reliable information. It allowed the internal censure of the leading international and foreign aid agencies to operate, keeping the issue away from public scrutiny for several decades. A few credible witnesses, a couple of policy proposals and some seemingly hard data were sufficient to develop a cascade of attention. But soon come, soon gone? May the wheel turn back again for the same reasons? May the facts brought forward in the corruption field prove hazy and unconvincing, the policy proposals not workable with only symbolic effects? Despite the plethora of statistical information developed during its one and half decade of policy attention, corruption is in many ways still a phenomenon characterized by scarce and unreliable information that colors anti-corruption as a policy field.

Let us first look at so-called 'grand' corruption where the amounts bribed, extorted or embezzled are significant and the transactors involved are operating from economic or political elite positions. The acts are criminal. Several international policy proposals such as OECD's anti-bribery convention addresses this phenomenon. How to judge whether countries really are following this (and similar) conventions, and how to judge whether the conventions are working and have impact on corruption of this kind? Since we are here dealing with individual, criminal acts, governance indicators are of little help. Particular individuals and organizations have to be caught for it to have impact on the potential mass of corrupt transactions.

And here the fact that it is difficult to establish reliable facts about individual, criminal corrupt transactions, determine both the monitoring issues, the actual impact of the policy proposals as well as the coloring of the public debates around them. For example, if only a few enterprises are caught in bribing foreign officials, it may imply that these kinds of transactions in fact are rare, or that the bribing of foreign officials are common, but the authorities make few efforts in catching them, or, or that they may be common but so inherently difficult to prove that only few cases may be found even if the authorities are making great efforts. It is only in the second case that the conventions are likely to be of potential importance for actual corruption, but then it is not in any country's own interest in catching its own enterprises. If this kind of bribing is known to be common it implies that foreigners will gain much business in your country that way. Why should your police force be eager to pursue your citizens? We are back to the prisoners' dilemma again. In principle it could, of course, be solved by some form of international policing, but no such organization is, to my knowledge, on the horizon. And even if we got one, we will return to the dilemma of scarce and unreliable information that rules such large areas of this field

In any case it is a fact that few cases are brought forward to the courts, but this fact cannot be used to identify the rarity of corruption nor identify whether countries are following the convention, or not. Nor can any increase in the number of cases tell whether the bribing of foreign officials or the economic police have become more serious. Seen from another point of view, the knowledge that elite corruption is difficult to prove together with the notion that it is likely to be prevalent at least as a temptation, implies that if in any particular case an enterprise or an official become

suspected in public, it makes it almost impossible for them to disprove it and the public suspicion may linger on.

Now let us look at the governance indexes. They may give rise to an impression that corruption is like any other kind of macro-economic variable amenable to systematic steering through a clever use of technocratic policy instruments. Are they sufficiently reliable to be used in that way? So far, the main policy discussion around the corruption indexes has focused on their rankings. It is clear that the open ranking of countries made by TI when presenting its CPI index has had considerable impact on the policy discussion of corruption in many countries making the political elites among the lower end of the developing countries to feel (unfairly) exposed. In particular the outcomes of neighboring countries have been eagerly discussed, and changes in their mutual ranking have in practice been used as a benchmark to gauge whether the situation in a given country has improved or not. Kaufmann et al (2005), however, have refused to present their WBI index so that countries are ranked after their corruption value on their index. The reason given has been that they consider the country confidence intervals too wide to make the country ranking statistically significant, although these intervals have narrowed down since their first edition of the index after a larger number of sub-indexes have been included.

Nevertheless, it is the WBI index that has been applied when some foreign aid institutions have started to allocate parts of their foreign aid across the poorest countries after their performance on the WBI index. USAID has led this development (USAID, 2005). That is, some of the OECD countries have started a systematic monitoring of a larger group of developing countries governance characteristics to a large extent based on their performance on the WBI's 'control of corruption' and related governance indexes in order to reward and punish them accordingly with aid.³²

While not endorsing this practice, Kaufmann et al (2005) has developed a study of the statistical significance of changes in the governance indicators for each country

³² US foreign aid institutions have begun to do this most systematically for aid for the so called Millennium Challenge Account (MCA). First, a group of countries with sufficiently low income is determined. The country with median level of corruption in this group is then determined. No country with corruption performance worse than the median is eligible to aid from MCA. Then the actual norm for aid to receive is determined by a rather complex formula based on a number of governance indicators in addition to the corruption performance.

that would be extremely helpful for such monitoring. For a few countries the changes have been large enough to be statistically significant to indicate improvement or worsening of their governance characteristics. Significant or not rely, of course, on the reasonableness of the statistical assumptions applied by Kaufmann et al. .

So far governance indexes are for many purposes the only instruments available for gauging quantitatively the effects of policies trying to reduce the incidence and severity of corruption. Their loose ties to the reality remain a basic weakness. If a successful anti-corruption campaign reduces the actual levels of corruption, brings more cases to court or at least into the public, the public –including the experts – are likely to perceive higher corruption levels. Isolated scandals may shift the perception. Countries with an aggressive investigative journalism like Kenya may for that reason be perceived as more corrupt than Tanzania that traditionally has had a more docile press. A natural response to a corruption index-guided aid allocation, might be for the Kenyan authorities to pacify the journalists. Sometimes their high perception content might yield implausible increases when other economic data are changing, as during financial crises (Argentina and Indonesia) or effective, but non-liberal anti-corruption campaigns (Malaysia). In more quiet situations their feedback on themselves may make the indexes immune against changes in the data.

Another peculiarity when applied as part of a monitoring apparatus may be considered as an advantage, however: Their weak links to actual performance of country elites, their complex composition of separate sub-indexes with basis in widely different sources of information make them also difficult to manipulate in order to reach easy gains in the monitoring indicators – a perennial problem of any monitoring scheme. Alas, their difficulty in manipulation make them also unfit to tell the monitored agents what to do. Reward or punishment tends to come out from the blue.

Summing up, despite all useful quantitative information that has been collected – particularly at the country level, information that may be acted upon is still scarce and unreliable for that purpose. For some countries with extensive corruption most forms of corruption is public knowledge, however, and fairly easy to collect, but here no existing public apparatuses work in ways that may action feasible. For the rest, the

information is partly scarce (court cases, police and journalist information) and partly unreliable, compounded in corruption perception indexes.

I believe that corruption is a deep and common form of transaction in the present day world, but we only rarely possess reliable information about it, at least not at the higher levels of authority in the private and public sector. Possessing that belief at the individual level, it is easy to suspect certain groups of players to be involved, but difficult to prove. It is easy to talk about anti-corruption policy in general, but difficult to implement it without nailing specific individuals, but that may often be impossible in practice due to a lack of evidence (or lack of power). Corruption has become a form crime believed to be both common and harmful, but difficult to detect, and even more difficult to fight. A major reason is the lack of evidence, the situation of scarce and unreliable information. It easily creates a feeling of suspicion and apathy. Considerable efforts have been made by researchers to bring forward evidence, but it is rarely precise and based on clear evidence, observations..

As far as I may judge, we are still living in a house of sticks. That is not caused by laziness, however, but by the lack of bricks. To keep the wolf away we have tried to dress up the sticks as bricks. The wisdom of that procedure may now be disputed

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Appendix. Some remarks and information on perceived vs. reported corruption

The key issue in empirical corruption research is the status of the corruption indexes that contain a mixture of perceived and reported corruption. In the paper I have suggested several ways to proceed to explore this matter critically. One is to divide the leading indicators on the basis of the information given about the informational basis of the sub-indicators: Study the mutual correlation among the clearly perception based sub-indexes, the mutual correlation among the mixed perception-observation based sub-indexes and finally the mutual correlation among the clearly observation-related sub-indexes. Then we may correlate the group indexes against each other. If the correlation among the perception-based indexes are very strong, but not so strong with the observation-based indexes, it would be reasonable to interpret this as an indication that the perception indexes contain a significant social interaction factors, and the value of these sub-indexes in the aggregate should be discounted. If there is not any systematics of the suggested kinds the existing interpretations are more defensible. Most of the purely perception-based sub-indexes are, however, not the perceptions engaged in the corrupt transactions, but the perception of outsiders. The mixed indexes contain mostly perceptions of potential insiders.

Ideally, perceptions of the agents involved should be related to the experience of the same agents. This is what Cabelcova (2001) has done for Ukraine, but she did not do it in any comparative perspective. This is what Abramo (2005) does using data from the TI's barometer published December 2004. this is a survey based on a large number of individual household respondents who in addition to being asked about a number of perceptions also were asked about their experience with petty corruption the last year. Abramo finds none or very strange relationships between the different forms of perceptions and expectations and experience. Here I will not try to analyse his results, only comparing the TI barometer experience data with the existing experience survey the International Crime Victimization Surveys from the mid 1990s and the leading perception-composed indexes the WBI and CPI. The countries chosen are the ones that are contained in both the TI Barometer and the ICVS, since they are the constraining ones now.

I will not analyse the issues here, just put down the table that suggests that the TI barometer from 2004 corresponds less well with the other indexes.

Appendix table 1. Perceived and reported corruption indexes

Country	TIB-04	ICVS-95-6	CPI-04	WBI	r(TIB)	r(ICVS)	r(CPI)	r(WBI)	
Albania	30 %		13 %	2.5	-0.72	2	10	4	4
Argentina	6 %		29 %	2.5	-0.44	15	2	4	7
Austria	1 %	0.7%		8.4	2.10	27	21	25	28
Bolivia	29 %		26 %	2.2	-0.78	3	3	3	3
Brazil	11 %		18 %	3.9	-0.15	13	7	12	10
Bulgaria	6 %		19 %	4.1	-0.04	15	5	14	11
Canada	1 %	0.4%		8.5	1.99	27	24	26	25
CostaRica	14 %		10 %	4.9	0.78	11	14	18	18
Croatia	9 %		16 %	3.5	0.08	14	8	10	12
Czech R.	21 %		8 %	4.2	0.30	6	15	15	15
Denmark	2 %	0.3%		9.5	2.38	21	25	30	30
Estonia	6 %		4 %	6.0	0.82	15	18	19	19
Finland	3 %	0.1%		9.7	2.53	19	30	31	31
France	2 %	0.7%		7.1	1.44	21	21	22	22
India	16 %		21 %	2.8	-0.31	10	4	7	8
Indonesia	13 %		31 %	2.0	-0.90	12	1	1	1
Japan	1 %	0.0%		6.9	1.19	27	31	21	20
Latvia	18 %		14 %	4.0	0.23	9	9	13	14
Lithuania	32 %		11 %	4.6	0.36	1	12	16	16
Netherlands	2 %	0.5%		8.7	2.08	21	23	28	27
Philippines	21 %		4 %	2.6	-0.55	6	18	6	6
Poland	5 %		5 %	3.5	0.16	18	17	10	13
Portugal	2 %		1 %	6.3	1.23	21	20	20	21
Romania	25 %		11 %	2.9	-0.25	4	12	9	9
Russia	21 %		19 %	2.8	-0.72	6	5	7	4
S. Africa	3 %		8 %	4.6	0.48	19	15	16	17
Spain	2 %	0.3%		7.1	1.45	21	25	22	23
Switzerl.	2 %	0.2%		9.1	2.17	21	29	29	29
UK	1 %	0.3%		8.6	2.06	27	25	26	26
Ukraine	25 %		13 %	2.1	-0.89	4	10	2	2
USA	0 %	0.3%		7.5	1.83	31	25	24	24

Explanation of the table: TIB –04 is the share of the respondents in the TI 2004 barometer survey who reported they had experienced to have paid a bribe last year. ICVS is the same reported experience collected in the International Crime Victimization Surveys from 1995- 1996. CPI 04 is the results from TI’s Corruption Perception index from 2004, and WBI is the same for the WBI’s ‘control of corruption’ indicator. r () is the country ranking results for the relevant indicator ranked so that the most corrupt country in the table is ranked as 1.