Quantitative approaches to assess and describe corruption and the role of UNODC in supporting countries in performing such assessments

Background paper prepared by the Secretariat
Executive summary

There is broad consensus that evidence-based assessments of corruption should be encouraged in order to better develop and implement anti-corruption measures.

The use of statistical methods to describe and qualify corruption poses a number of methodological challenges. Since data based on reported cases of corruption usually do not reflect the real extent of corruption, a number of alternative approaches have been developed. Examples of such methods are represented by expert’s assessments and composite indicators. Such methodologies present advantages and drawbacks. Also, it is perceived that such methods can play an important role at an initial phase, when there is a need to provide some baseline indications. At a later stage, when awareness about corruption issues has grown, there is often stronger demand for objective and policy-relevant indicators.

A promising approach is represented by assessments based on representative sample surveys of a given population, as for example households or businesses. The conduct of sample surveys allows the direct collection of data on experience of corruption. Several aspects of corruption episodes can be fully investigated, with the view to better understand modalities, purposes and actors involved. Various typologies of surveys can be implemented, which target different groups such as households, businesses or civil servants.

In the field of corruption assessments, reliability of the data producer is also an important requirement. The involvement of government agencies in the production of evidence-based assessments of corruption is important to show country long-term commitment to formulate and monitor anti-corruption policies. At the same time, assessments conducted by governmental agencies may be perceived as not being fully independent.

In this context, the use of solid and transparent methodologies, better if tested and promoted at international level, represents a good practice to produce valuable results and, at the same time, to address possible doubts about reliability of data. The involvement of national statistical authorities can represent an additional element to guarantee data quality.

The conduct of assessments to measure and “characterize” corruption represents an extremely complex task, due to methodological challenges and its political sensitivity. Where requested, UNODC is ready to provide its technical support to produce national assessments using the most up-to-date methodologies. A context of nationally owned process and international technical support is probably conducive to evidence-based assessments that can be valuable to a large range of stakeholders and produce high quality data that can impact on strategies and policies to fight corruption.

1. Background on measuring corruption

The interest in assessing the extent and describing nature of corruption is very high. Several attempts at measuring the worldwide extent of corruption have been made, either in broad contexts (such as, for example, corruption of public officials or business ethics) or in more specific areas (e.g., corruption in international assistance). A variety of measurement initiatives, rankings and indicators have been
produced by Intergovernmental Organizations (World Bank), NGOs (for example Transparency International, Global Integrity), or the private sector (for example World Economic Forum, Gallup Int.). Furthermore, regional initiatives such as the Eurobarometer, Afrobarometer and Latinobarometro include issues relevant to the measurement of corruption among those surveyed.

UNODC, being the custodian of the UN Convention against Corruption (UNCAC), has a special role to play in this area. While the UNCAC does not contain a definition of corruption as such, it describes the phenomenon in its various manifestations, and provides some indications about the conceptual and operational framework in which a monitoring mechanism could be developed at international level. Article 61 of the UNCAC\(^1\) invites States Parties to collect data on corruption trends and on the broader context in which corruption takes place. Countries are invited to develop common definitions, standards and methodologies through exchange of data and analytical expertise, while international and regional organizations should facilitate this process.

Taking stock of the many initiatives in the field of assessing and monitoring corruption through quantitative methods, UNODC is willing to further improve existing methods and to support countries in implementing evidence-based corruption assessments. This paper presents main methodological and operational issues and the possible way ahead, with a focus on the role of governmental agencies and UNODC in this challenging field.

2. Issues relevant to measurement

Corruption is a crime in most jurisdictions. As such, the measurement of corruption shares, to a large extent, the same data collection and methodological problems as the measurement of conventional crime. Illicit behaviours are generally hidden and this makes them more difficult to identify and describe. In the case of corruption, the collection of evidence for analytical purposes is even more difficult for at least a couple of reasons:

- Defining acts of corruption is difficult since borders between licit and illicit behaviours are often blurred; moreover a multiplicity of forms of corruption exists

- In comparison to other offences, victims of corruption are less prone to report such cases, for reasons such as fear or reluctance to fight an established practice.

For these reasons, official data on reported cases of corruption tend to correspond to information about the response of criminal justice systems rather than information about true extent and nature of the crime itself.

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\(^1\) Article 61 – Collection, exchange and analysis of information on corruption: Para. 1 – Each State Party shall consider analysing, in consultation with experts, trends in corruption in its territory, as well as the circumstances in which corruption offences are committed; Para. 2 – States Parties shall consider developing and sharing with each other and through international and regional organizations statistics, analytical expertise concerning corruption and information with a view to developing, insofar as possible, common definitions, standard and methodologies, as well as information on best practices to prevent and combat corruption.
As a consequence, a large array of methods has been developed to provide assessments of corruption and monitor its trends and patterns. Given the difficulty to collect data on factual experiences of corruption, methods based on expert’s assessments and on re-elaboration of available data (i.e. composite indices) have gained prominence.

3. Review of existing tools

3.1 Experts’ assessments

In this approach a selected group of experts is asked to provide an assessment of corruption trends and patterns in a given country (or group of countries). The basic idea behind expert assessments is to collect summary information on a given topic from a selected set of individuals who, supposedly, are already familiar with the searched information. Overall, the use of expert assessment methodology for the measurement of corruption is seen to have a number of strengths and weaknesses. The main advantage is that with this approach it is relatively easy and inexpensive to obtain needed information, especially when time and/or resources are limited; however, it must be borne in mind that the specific selection of experts, their real knowledge about the topic and their understanding of corruption are all factors impacting on final results. The method has also been criticised as imprecise (being based predominantly on perceptions) with results subject to a high degree of subjective interpretation.

Such method has often been used within the framework of governance assessments with a view to assessing risks and rating countries. As such, corruption is only one of the dimensions of which expert assessments of governance deal with. Results can, nonetheless, be useful for qualifying perceptions and raising awareness of investors and/or donors on specific situations that need to be addressed. They may, however, be much less useful in measuring the impact of actions or programmes and as performance indicators.

Such expert governance assessments have often been conducted by commercial risk rating agencies. Perhaps amongst the best known of these are the risk event indexes of Global Insight that include the risk of “losses and costs of corruption”, reports by the Economist Intelligence Unit and the Qualitative Risk Measure in Foreign Lending-Financial Ethics Index (QLM-FE) of Business Environment Risk Intelligence (BERI). International organizations have also been active in this field, for example the World Bank (Country Policy and Institutional Assessment), as well as government agencies (Human Rights Report of the United States State Department).

Non-governmental organizations and academic institutions have also engaged in expert assessment of the extent of corruption. The Freedom House Nations in Transit series, for instance, examines democratization and reform in several states of Central Europe and Eurasia. The study includes an analysis of perceptions of corruption, business interests of policy makers, laws on financial disclosure and conflict of interest, and the effectiveness of anticorruption initiatives.

3.2 Composite indices

As the name suggests, composite indices represent a method of combining a variety of statistical data into a single indicator. This approach is often used to quantify in a
synthetic manner multi-dimensional concepts. Examples of this kind are represented by the Human Development Index produced by UNDP or indicators of quality of life used to rank countries or cities across the world. Similarly, techniques to aggregate data and indicators have been used to build corruption related indicators.

The production of composite indices on corruption has represented a powerful way to draw attention on the issue of corruption worldwide and to convey the message that its measurement is possible. The publication of corruption indices attracts attention from the media and policy makers, thus representing a valid incentive for action. At the same time, composite indicators present some weaknesses that should be kept in mind:

• data from different sources, on related but distinct topics (corruption, business environment, transparency, etc.) are lumped together so that it is frequently unclear what is being exactly measured by the index,

• the construction of the composite indicators requires a number of choices by the data producer (complex computation techniques, selection of sources, selection of primary indicators) which introduce several elements of subjectivity in the final outcomes (different techniques would produce different data)

• the final result of composite indices is represented by the ranking of countries, which does not constitute an actual measurement of corruption and does not provide direct information to be used for policy making purposes.

An example of such indices is the Corruption Perception Index (CPI). The organization Transparency International was the first to attempt the integration of data from a number of sources. This was done with a view to compensating for missing data and to providing an overview of the corruption situation based on a range of sources and from a variety of points of view (including experts, individual citizens, and businesses). The criteria for inclusion of a source in the index is that the source must measure the overall extent of corruption (separately from other issues such as political instability), provide an assessment of multiple countries, and be able to rank these countries through the assignment of a quantitative value.

The Corruption Control Indicator (CCI) of the World Bank Governance Indicators is one of the many located within the context of a wider governance measure. The governance indicators themselves measure six dimensions, including the control of corruption.

A further composite index is the Global Integrity Index (GII), produced by Global Integrity, a non-governmental organization producing governance and corruption assessments at the international level through local level assessments carried out by researchers and journalists. The Global Integrity Index aims at assessing the existence and implementation of anti-corruption law and regulations in different countries.

4. Sample surveys on experience of corruption

In addition to indirect methods, such as expert’s assessments or composite indices, an approach to collect information on corruption is represented by sample surveys. The conduct of sample surveys allows the direct collection of data on experience
and opinions of representative samples of a given population, as for example households or businesses.

Sample surveys, when conducted in a methodologically sound manner, can give an answer to a range of questions, as for example:

• What portion of individuals (or enterprises) had to pay a bribe in a given year?
• What are the characteristics of victims and perpetrators?
• Has the level of corruption changed over time?
• Are there certain population groups more at risk of being victim of corruption (i.e. vulnerable groups)?
• What are the sectors/regions most affected by corruption?
• How much corruption is reported to competent authorities?
• What operations are more at risk of corruption?
• What amounts are paid? When and by whom?

In general terms, sample surveys are not able to give an answer to all-inclusive questions such as “How much corruption exists in a given country?” or “How much money is paid every year for corruption?” Rather they try to collect evidence on those forms of corruption or threats to integrity that are more common, e.g. bribery, by providing a range of information that can be directly used for policy-making purposes.

Various typologies of surveys exist, which target different groups with different roles and experience of corruption:

• Surveys of individuals/households
• Surveys of business sector
• Surveys of civil servants or specific sectors (police, judiciary, etc.)

4.1 Household surveys

In household sample surveys respondents are primarily asked about their experience of corruption as victims. Several aspects of corruption episodes can be fully investigated, with the view to better understand the relationship between public officials, services provided and private citizens. In addition to the prevalence of corrupt practices, it is thus possible to explore how corruption takes place, for what purposes, in what sectors and for which operations.

Questionnaires are tailored to local context and culture, while retaining a significant component of internationally comparable information. Survey results allow for setting baseline data for monitoring and evaluation, assisting in identifying corrective measures and determining the success rate of tailored interventions.

A recent example of corruption-related data has recently been produced by UNODC for a number of African countries, in the context of sample surveys on experience of
household as victims of several forms of crime, including corruption. Through these surveys, information on direct experience of corruption can be collected. For example, indicators on incidence of bribery can be developed.

Figure 1

**Percentage of respondents who had to pay a bribe to a public official in the 12 months before the survey (2007)**

Figure 1 shows the results obtained for 5 countries, in terms of respondents who had to pay a bribe to a public official over a period of one year. Along to information on extent of bribery, surveys also collect data describing the nature of corruption, such as purpose, amounts paid, operations/procedures involved or, as figure 2 shows, type of public officials involved. The figure shows the various typologies of public officials to whom the payments were made, for three selected countries. It is also possible to explore if certain population groups are more at risk of corruption than others, for example on the basis of personal characteristics such as sex, education attainment, income level. In the context of surveys, information can also be collected on attitudes and opinions on corruption-related issues, thus allowing the cross analysis with actual experiences. Surveys allow going beyond information on extent of forms of corruption and provide context information, which is an important element to design policy measures.

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2 They have been produced in the context of the Data for Africa initiative (see at [http://www.unodc.org/unodc/en/data-and-analysis/Data-for-Africa.html](http://www.unodc.org/unodc/en/data-and-analysis/Data-for-Africa.html)).
4.2 Business surveys

Sample surveys can also be conducted in the private sector, where respondents are usually executives of a random sample of enterprises. A range of topics can be investigated, from experiences to opinions and perceptions. The aim of these surveys is to measure the frequency and impact of corrupt practices among the business community. Such measurement is important in light of the fact that corruption is amongst the types of crime most frequently affecting successful economic development of countries. Examples of international business surveys include: the International Crime against Businesses Survey (ICBS) and Crime and Corruption Business Surveys (CCBS), the Global Competitiveness Survey, the World Business Environment Survey, and the World Competitiveness Yearbook.

Results from a survey recently conducted in an African country indicated that almost 10 per cent of the entire sample had to pay bribes in the year before the survey. When restricting to businesses which had at least one contact with public officials in the year before the survey, the proportion of those who had to give money increases to 34 per cent. On average, one out of three enterprises had to pay a bribe to public officials when carrying out certain administrative procedures. The survey found that some operations more frequently involve the request of payment of bribes: interviewed businesses reported that, when dealing with police investigations or traffic offenses, they were requested the payment of extra money in more than 40 per cent of cases (see figure 3). Also in the case of clearance of goods at customs, the percentage of business who were requested to pay a bribe is considerable (almost 35 per cent), while the lowest percentage has been recorded for courts (19 per cent). Data also show that, among those who admitted the payment of
bribes in the year before the survey, almost two thirds paid public officials at least
twice in the course of the year and almost half of this group paid bribes 4 times or
more in the same period.

Figure 3

Percentage of businesses who had to pay bribes, among those who performed
selected operations

<table>
<thead>
<tr>
<th>Operation</th>
<th>Did not pay a bribe</th>
<th>Don't know</th>
<th>Paid a bribe</th>
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<tbody>
<tr>
<td>Private procurement of goods/services</td>
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<tr>
<td>Contact with the court</td>
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<td>Vehicle registrations</td>
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<td>Residence and work permits</td>
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<tr>
<td>Vehicles circulation certificates</td>
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<tr>
<td>Public procurement of goods/services</td>
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<tr>
<td>Business licences</td>
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<td>Environment/health regulations</td>
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<td>Goods at customs</td>
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<td>Police investigations</td>
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<td>Traffic offences</td>
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4.3 Surveys of civil servants

Another typology of sample surveys directly targets public officials. Sometimes
these assessments are focussed on specific sectors, as for example police or the
judiciary. These surveys have a broad focus and aim at collecting information on the
working conditions of civil servants, with the view to identify weaknesses in work
organization and environment and, more specifically, possible hotspots for corrupt
practices. The experience and perceptions of respondents on recruitment and
promotion practices, job mobility, training frequency, work incentives, satisfaction
with salary and career, coupled with information on corruption experiences and
perception, provide crucial information to elaborate policy measures.

5. Official data on corruption? The role of government agencies as data producers

The strong interest for objective assessments of corruption has led many actors to
producing statistical data and analysis in this field. In this effort, a prominent role
has been played by NGOs, international agencies and the private sector. At a later
stage, following the progressive establishment of anti-corruption bodies, these
agencies have started to promote integrity and corruption assessments.

As mentioned already, official statistics on corruption are mostly limited to counts
of criminal justice or administrative responses, in terms of crimes reported to the
police or anti-corruption bodies, persons arrested, tried and convicted. Of course
these data, although crucial for benchmarking and monitoring the implementation of
anti-corruption measures, cannot be used to measure the extent of the phenomenon.
The involvement of government agencies, in particular national statistical authorities, in the production of evidence-based assessments of corruption should be encouraged.

Some may fear that assessments conducted by governmental agencies may not be fully independent. In the field of corruption assessments the status of independence, real or perceived, of the agency responsible for carrying out the assessment has certainly an impact on the use and acceptance of survey results. The involvement of the national statistical authority could represent an additional element to guarantee data quality. In general terms, national statistical offices have the technical capacity to conduct complex surveys such as those on corruption. At the same time they are government bodies with a high degree of independence, especially for what concerns methodologies and results of their statistical production.

In this context, the use of solid and transparent methodologies, better if tested and promoted at international level, represents a good practice to produce valuable results and, at the same time, to address possible doubts about reliability of data. Official survey data can help public authorities to gain a better understanding of corruption patterns and trends, so that evidence-based policies can be formulated and implemented.

6. The role of UNODC

In many countries, the conduct of assessments to measure and “characterize” corruption represents an extremely complex task, due to methodological challenges and its political sensitivity. Where requested, UNODC is ready to provide its technical support to produce national assessments using the most up-to-date methodologies. A context of nationally owned process and international technical support is probably conducive to evidence-based assessments that can be valuable to a large range of stakeholders and produce high quality data that can impact on strategies and policies to fight corruption.3

In addition to technical support to countries, UNODC is aware that existing methodologies and indicators on corruption require further development. Methodological work to consolidate existing approaches is thus needed to produce high quality and comparable data. Depending on available resources, UNODC intends to pursue – in collaboration with relevant national and international agencies, NGOs, private sector, experts – the development of standard survey tools (questionnaires, modules, toolkits), identify core set of statistical indicators, and develop analytical capacity.

7. Conclusion

A variety of actors has been very active in the field of quantitative assessments of corruption, thus cumulating an important experience in terms of methodologies to measure this complex and sensitive topic. On the basis of such experiences, taking into account advantages and disadvantages of most common approaches, it appears advisable to pursue the development of sample surveys. Through this methodology it is possible to produce evidence-based assessments of corruption where:

3 At present, UNODC is implementing corruption surveys in around 10 countries.
prominence is given to measurement and description of experience of corruption rather than perception, thus providing a more objective perspective to measures and analysis produced

in addition to corruption extent, it is possible to characterize corruption by providing information on modalities and actors involved

the source of data and analysis is the population of reference, instead of group of experts

indicators produced are uni-dimensional (bribery, sectors involved, reporting rates, etc.) thus providing clear indication to data users, primarily to policy-makers and anti-corruption agencies

the adoption of standard methodologies will allow international comparability of data, not with the view of creating rankings but rather to compare country patterns and trends, also to identify most efficient anti-corruption measures

As any other approach, also sample surveys have limitations, such as the scope of types of corruption that can be addressed (for example, it is unrealistic to capture forms of grand corruption in sample surveys) and the cost of surveys, which are significantly higher than experts assessments or elaboration of composite indices.

Several agencies, including UNODC, are working to provide support to countries wishing to undertake corruption assessments based on sample surveys and to further improve survey tools. UNODC stands ready to undertake further such projects in response to country requests.