A Perception and Exposure Local Corruption Index (PELCI): Egyptian experience.

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Abstract

A new index, the Perception and Exposure Local Corruption index (PELCI), is suggested as a composite index of two indices (PLCI and ELCI) reflecting two: perception of and exposure to corruption. Each index addresses several aspects of corruption. Results indicate that the level of corruption perception is higher than the level of exposure on the local level and suggests that corruption has its local aspects that need to be taken into consideration. PELCI can be used to motivate champions of corruption alleviation and to enrich evidence based dialogue on action plan to implement and evaluate specific interventions on the local level.

Key words: accountability, local governance, corruption assessment.

1. Introduction

Indices to measure corruption perception play an important role in raising the awareness on the spread of corruption and its trend. International indices are instrumental in comparing countries and in reflecting changes across time. These indices enrich as well national public debates related to the impact of corruption on development and poverty alleviation and put pressure on government to adopt anti-corruption policies.

In this paper a new index that is culture specific and action oriented on the local level is suggested. The aim is to complement international indices with national ones that can be used for monitoring and evaluation and for assessing anti-corruption interventions. The suggested index can also help the society to monitor corruption on the local level based on measuring both the perception of citizens and their exposure to manifestations of corruption.

This attempt is not an alternative to indices developed by international organizations such as Transparency International and the World Bank. It is rather a road map to establish a "name and shame" process on the local level and on the sector level. It can be used to motivate champions of corruption alleviation and to enrich evidence based dialogue on action plan to implement and evaluate specific interventions.

2. Methodology

To better understand the phenomena of corruption a qualitative expert opinion analysis was carried out by a number of sociologists and political scientists determine the manifestations of corruption in the Egyptian society. The analysis is used as a framework to develop a tool to measure perception and exposure to corruption in the Egyptian society. The analysis suggests the following four manifestations of corruption as the most prevalent in the Egyptian society:
  a. Bribery, gifts and gratuities,
  b. Disposal of public funds for personal benefits,
  c. Reliance on personal relations and family ties to facilitate governmental procedures, and
  d. Theft of public funds.

These manifestations are not necessarily universal and other societies can use different type and number of manifestations to produce their own index.

A questionnaire was developed to measure the two dimensions related to corruption: perception and exposure. The first set of questions focuses on how respondents perceive the spread of each of the four aspects of corruption in the community. The second set of questions measures whether the respondent or any of his/her family members has been exposed to each of the four aspects of corruption. Respondents were asked to identify the sector with the highest level of perceived corruption.

Each set of questions was quantified in an index that ranges from 0 to 100, to measure perception local corruption (PLCI) and exposure local corruption (ELCI). A composite index, the Perception and Exposure Local Corruption Index (PELCI), is then calculated as the average of the two indices (PLCI and ELCI).

3. Results

Results showed that "reliance on personal relations and family ties to facilitate governmental procedures" is the highest perceived manifestation of corruption. Ninety one percent of the respondents reported that this manifestation is prevalent with low, medium or high degree. The second highest manifestation of corruption was "bribery, gifts and gratuities" with 88% of the respondents reporting that it is prevalent in the society, followed by "disposal of public funds for personal benefits" with 86%. The lowest perceived manifestation was "theft of public funds". Nearly, two third of the respondents believe it is prevalent in the society.

When respondents were asked about exposure to corruption, "disposal of public funds for personal benefits" came first. One in every three respondents reported an individual or family exposure. This manifestation was slightly higher than bribery, gifts and gratuities (32%) and with "reliance on personal relations and family ties to facilitate governmental procedures" (28%). As with perception, the lowest aspect with exposure was "theft of public funds" (8%).

Analyzing corruption perception and exposure by demographic variables indicates that corruption perception is increasing with educational level and is higher in urban areas. Governorates differ significantly suggesting a local specificity of corruption perception. Similarly, corruption exposure index is higher among highly educated and among residents of urban areas. Despite the fact that the difference between males and females in corruption perception is minute, the exposure index is significantly higher among females (49 vs. 39).

Table 1 Perception and exposure corruption index by demographic variables.

		Perception (PLCI)	Exposure (ELCI)	P - E	(P-E)/E (%)	PELCI
Total		56.0	43.7	12.3	28.1	49.8
Gender	Male	57.3	48.9	8.4	17.2	53.1
	Female	54.7	38.5	16.2	42.1	46.6
Education level	Illiterate	47.9	39.9	8	20.1	43.9
	Low	50.9	39.7	11.2	28.2	45.3
	Medium	56.9	43.4	13.5	31.1	50.1
	University+	67.9	52.6	15.3	29.1	60.3
Residence	Urban	60.0	47.8	12.2	25.5	53.9
	Rural	52.7	40.2	12.5	31.1	46.4
Governorate	Range	(49.6, 62.6)	(36.1, 51.2)	(6.4, 16.5)	(11.1, 29.6)	(42.9, 56.2)

As indicated in Table 1, the perception index is consistently higher than the exposure index. On the average the difference is 12.3 points. In other words, perception is 28% higher than exposure. The perception-exposure gap is higher among females and among literate.

The two indices were calculated for each of the 29 governorates of Egypt. A linear regression model was applied to the data to estimate the amount of variability in

perception that can be attributed to exposure (Figure 1). The results indicate that $R^2=55.2\%$, i.e., more than half the variability in corruption perception can be explained by exposure of the respondent or one of his/her family members to corruption. The unexplained variability can be attributed to other factors such as media coverage of corruption or word of mouth on cases of corruption.

Local aspects of corruption

Egypt has been always a centralized state and governorates are purely administrative units with limited autonomy in decision making. Corruption intensity and distribution, however, appear to be local and do not reflect a unified manifestation across governorates. Results indicate that the level of corruption perception is not similar on the local level and suggests that corruption has its local aspects that need to be taken into consideration. Figure 2 illustrates that the ranks of sectors within each governorates are different. Even within governorates that have similar economic and urban landscape corruption perception is far from being identical. This can be demonstrated comparing ranks of sectors within urban governorates (the six governorates to the left), within "lower Egypt" (the following 9 governorates), within "upper Egypt" (the following 9 governorates) or within frontier governorates (the 5 governorates to the right). Furthermore, the disparity of corruption level among governorates within each sector is supporting the argument that corruption is a local phenomena and hence needs interventions that are sensitive to local conditions (Figure 3&4).

Communicating results

The index is calculated for each governorate and sector and then organized in a two dimension table. Governorates are placed in rows and sectors in columns. Two matrices were then produced. The first one (Matrix A) is displaying ranks of governorates within each sector, while the second matrix (Matrix B) is displaying ranks for sectors within each governorate.

When constructing Matrix A, governorates are grouped in three equal groups within each column. Three color codes are used to identify the different relative levels of perceived corruption: red color for high, yellow for medium and green for low. The first group includes governorates having the highest scores and the third group includes governorates having the lowest scores. Matrix A is designed to monitor corruption by line ministries and central agencies. It can be used to set priorities for corruption interventions within a given sector (column) by focusing on those governorates that have a high level of corruption perception rating. Comparing the matrix overtime can be useful in evaluating these interventions and in setting a system of accountability.

On the other hand, Matrix B is designed to monitor corruption by local authorities. It includes a ranking of sectors within each governorate (row). Sectors are grouped in three equal groups. Each sector belonging to the group that includes the sectors with highest level of perceived corruption is given the red code in the matrix. Similarly, sectors belonging to the medium group are given a yellow code and sectors belonging to the low group are given a green code. Matrix B can be an easy tool to build advocacy campaign on the local level and to maximize the benefit from scarce local resources of NGO's to fight corruption by focusing on sectors with high perceived corruption. The matrix can be used by member of parliaments and local council representatives to hold local authorities accountable for corruption and to identify actions needed to reduce the level of corruption in their communities by focusing on sectors that are ranked by citizens as more corrupted in the community.

Producing the two matrices yearly can be a tool for: 1) Evaluating the impact of interventions designed to reduce corruption, 2) Setting a system of accountability on the local and sector level, 3) Measuring progress over time, and, 4) Revising priorities and gaps.

Figure 1 Association between exposure and perception in 29 governorates, Egypt 2009.
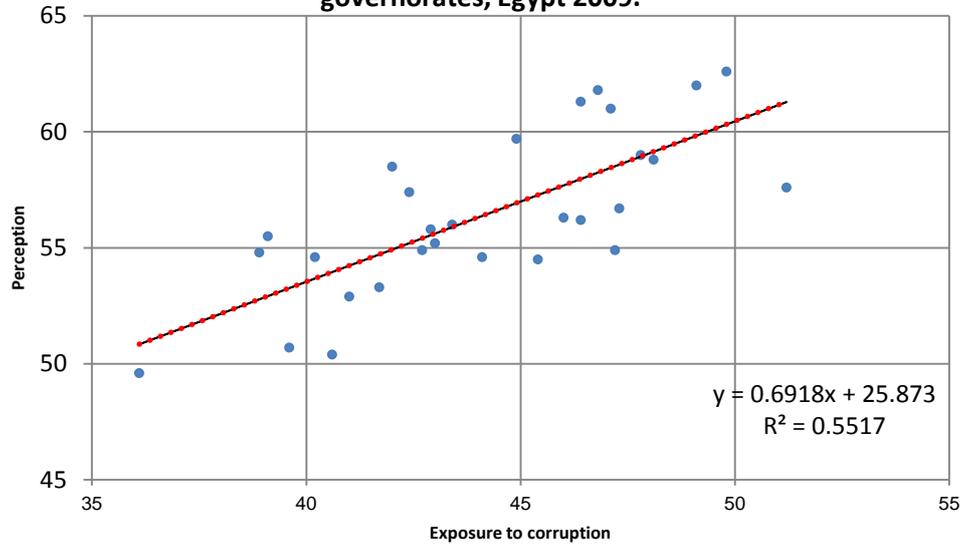
$y = 0.6918x + 25.873$
$R^2 = 0.5517$

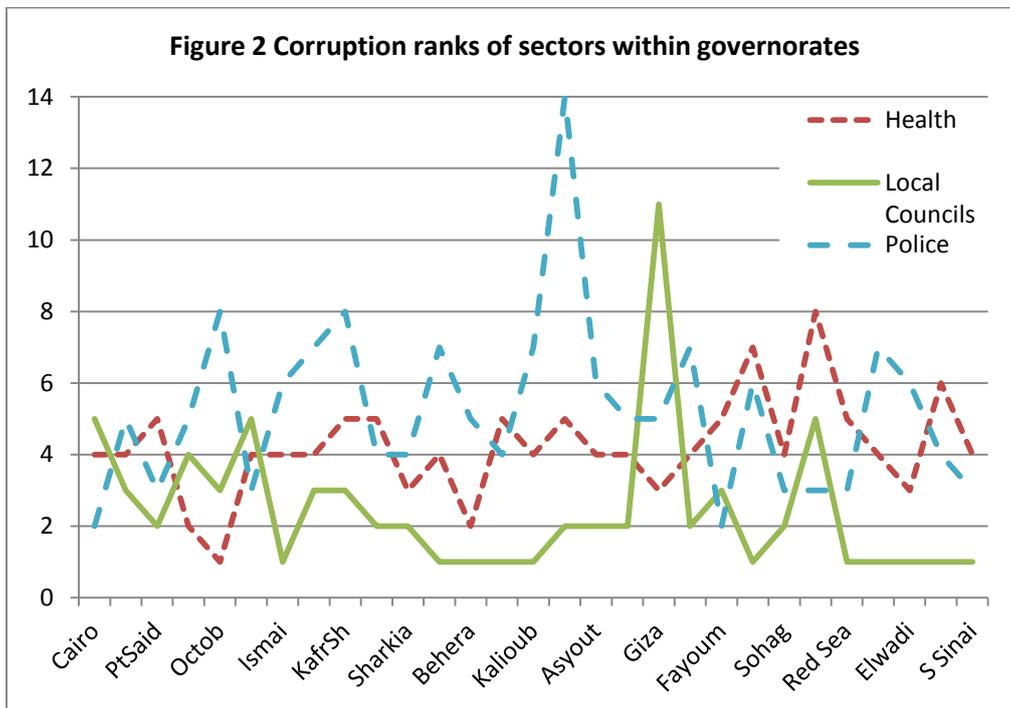**Figure 2 Corruption ranks of sectors within governorates**

Figure 3 Corruption in the highest 5 sectors by region, Egypt 2009.
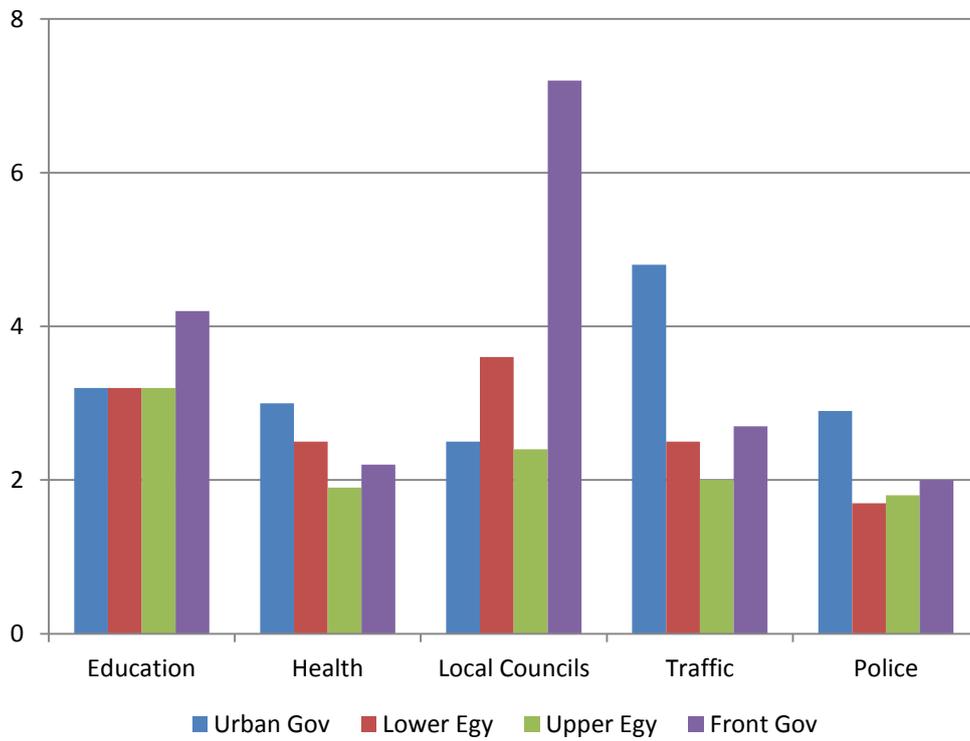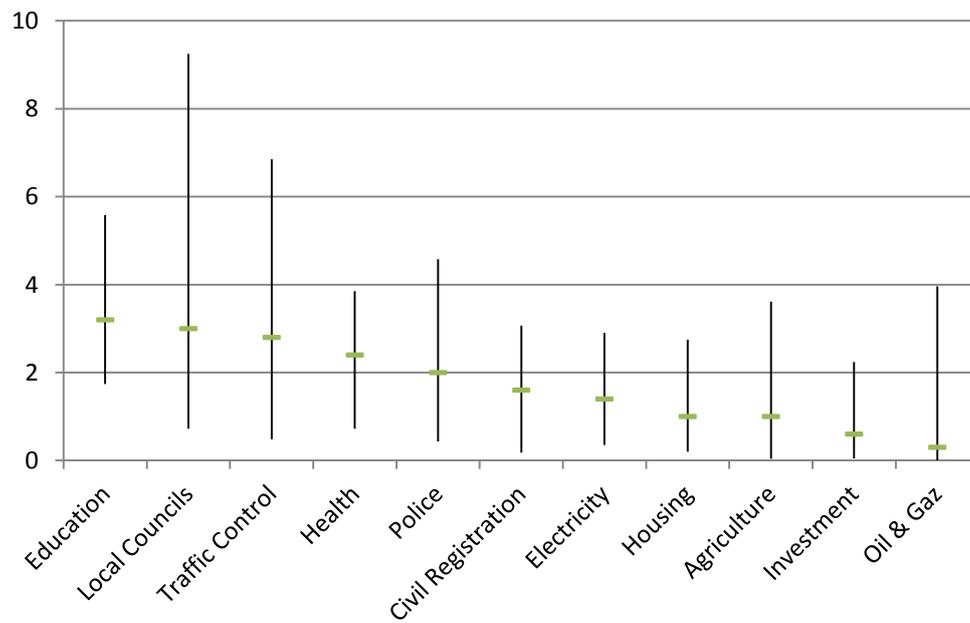

Figure 4 Maximum, mean and minimum of corruption in governorates by selected sectors, Egypt 2009.

4. Conclusions

The suggested composite index indicated an association between perception and exposure to corruption. The analysis on the local level illustrates that corruption has an important local dimension that might emerge from local conditions. Despite universal and national causes of corruption, the local dimensions should not ignore in designing interventions and in monitoring and evaluating anti-corruption programs.

Communicating the results in a user friendly and easy to understand way can benefit in engaging civil society organizations and citizens in priority setting, in monitoring and evaluation and in advocacy activities related to anti-corruption.

PELCI, PLCI and ELCI can be considered as guidelines to establish a "name and shame" process on the local level and on the sector level. It can be used to motivate champions of corruption alleviation and to enrich evidence based dialogue on action plan to implement and evaluate specific interventions on the local level.

References

Tina Søreide (2006). Is it wrong to rank? A critical assessment of corruption indices. Chr. Michelsen Institute Working Paper # 1.

Rose, R. and Mishler, W. (2007) Bridging the Gap Between the Perception and Experience of Corruption. Paper presented at 5th ECPR General Conference, September, 2007, Pisa, Italy.

Andersson, S. and Heywood, P. (2009) "The Politics of Perception: Use and Abuse of Transparency International's Approach to Measuring Corruption," *Political Studies,* 57, 746–767.