
# [Global Corruption Report 2006] Ten years of the CPI

# 10 Ten years of the CPI: determining trends

*Johann Graf Lambsdorff*[1]

Transparency International (TI) has published its Corruption Perceptions Index (CPI) annually since 1995. It is a composite index, using surveys of business people and assessments by country analysts to provide an annual snapshot of corruption perceptions in particular countries. Year-on-year changes in a country's CPI score are the result not only of changes in perceptions of a country's performance, but of changes in survey samples and methodology and alterations in the list of sources that constitute the index. Changes in sources have made it difficult to derive valid time-series information from CPI results and therefore TI has only been able to draw limited conclusions regarding progress or setbacks in the countries listed.

There is, nevertheless, a growing demand for trend data. The causes and consequences of corruption, as well as the success of anti-corruption efforts, can be better addressed and investigated when time-series information is available.[2] The following analysis of the CPI and its component data provides initial findings relating to country trends over the period 1995–2004.

## Data sources

Five sources used in the CPI contain sufficient data to be included in an assessment of trends as they have been used on a continuous basis for at least seven years and the methodology used to produce them has not changed significantly.[3] These are:

- the Economist Intelligence Unit (EIU), 1996–2004
- the Institute for Management Development, Lausanne (IMD), 1995–2004
- the World Economic Forum (WEF), 1996–2004
- the Political and Economic Risk Consultancy (PERC) in Hong Kong, 1995–2004
- Freedom House Nations in Transit (FH). Data is available for 1998, 1999/2000, 2001–04.

## Constructing time series

As with the CPI, all data must be placed in common units. Once this is achieved, we must observe how the time-series information of individual sources interact with each other. One source may be slow in responding to real changes; another might

be more topical. This can be determined by disregarding differences across countries and analysing only time-series information. Simple (fixed effect) panel regressions are used to observe whether delaying a time series improves its correlation with other sources.

Taking EIU as the dependent variable, we observe that the time-series information inherent in EIU data is well explained by IMD data, but less so by WEF data, for example. The explanatory power of the variables increases when using one period lagged values. This implies that EIU provides assessments of perceived levels of corruption with a one-year time lag. This may be because the local business people surveyed by the IMD and WEF gather topical information more quickly and are thus better placed to assess the current state of affairs. The strength of EIU data, on the other hand, may relate to its in-depth, but more time-consuming, country analysis.

When assessed against the other indices, the FH figures did not provide significant results, and so were left out of subsequent analyses. This may have been because of the different method used by FH to define and quantify corruption: FH tries to assess the governments' anti-corruption efforts, the success of which is difficult to evaluate.

## Constructing panel data

Based on the above findings, the EIU data was entered in lagged form. A corruption trend was determined for a country when the four data sources provide at least 15 observations. In order to avoid confusion with the original CPI data, all data for 2004 are set at zero. Table 10.1 shows the data for each year, ranked on a scale of 0 (very corrupt) to 10 (very clean). Bulgaria, for example, obtains –1.4 in 1995, implying an improvement to 0 in 2004. As revealed by the scores for 1996–2003, this was not an even development, but involved an initial deterioration to –2.4 before improvements were perceived.

## Interpreting the data

Given the inherent imprecision of subjective indicators, how certain can we be that a country improved or deteriorated? An improvement between 1995 and 2004 of 0.5 might be significant if observed similarly by all sources, while an improvement by 1 may be insignificant if only few and contradictory observations are available. To control for this, a test for the significance of a simple linear trend was conducted.[4] The usefulness of this test can be seen from Figure 10.1 for Argentina. The slope of this line is –0.16, indicating that Argentina experienced an annual drop in the CPI by 0.16. Statistical analysis allows us to determine the precision of the estimated slope. The standard error for this coefficient is 0.03, about a fifth of the slope. This factor (5 in the case of Argentina) is known as the *t*-statistic and provides statistical confidence that the slope is indeed positive (or negative).

Table 10.1 reports the annual change as determined by the test outlined above, the corresponding standard error and *t*-statistic. In cases where there was a significant trend,

Table 10.1: Trends in perceived levels of corruption

| Trends 1995–2004 | Observations | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | Annual change | Standard error | *t*-statistics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Argentina | 28 | 0.7 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | –0.1 | –0.6 | –0.4 | 0.0 | –0.16 | 0.03 | *–4.6* |
| Australia | 28 | –0.7 | –0.8 | –1.0 | –0.6 | –0.7 | –0.6 | –0.5 | –1.1 | –0.1 | 0.0 | 0.05 | 0.02 | **2.4** |
| Austria | 27 | –0.4 | –0.5 | –0.6 | –0.5 | –0.3 | –0.8 | –0.7 | –0.4 | 0.2 | 0.0 | 0.08 | 0.05 | 1.8 |
| Belgium | 28 | –0.1 | –0.1 | –1.4 | –1.3 | –1.5 | –0.4 | 0.0 | –0.1 | 0.0 | 0.0 | 0.08 | 0.06 | 1.4 |
| Brazil | 28 | 0.2 | –0.2 | 0.2 | 0.2 | 0.0 | –0.1 | –0.1 | 0.3 | –0.3 | 0.0 | –0.02 | 0.03 | –0.7 |
| Bulgaria | 15 | –1.4 | –2.4 | –2.4 | –1.0 | –1.0 | –1.0 | –0.6 | 0.0 | –0.4 | 0.0 | 0.15 | 0.05 | **3.3** |
| Canada | 28 | 0.6 | 0.6 | 0.4 | 0.5 | 0.5 | 0.3 | 0.4 | 0.3 | –0.1 | 0.0 | –0.07 | 0.03 | *–2.3* |
| Chile | 28 | –0.3 | –0.4 | –0.5 | –0.5 | 0.2 | 0.1 | –0.2 | –0.2 | –0.5 | 0.0 | 0.01 | 0.03 | 0.3 |
| China | 27 | –0.5 | –0.8 | 0.2 | 1.2 | –0.1 | 0.3 | 0.4 | 0.5 | 0.1 | 0.0 | –0.02 | 0.03 | –0.5 |
| Colombia | 27 | –0.2 | 0.0 | –1.3 | –0.9 | –0.4 | –0.2 | –0.3 | 0.0 | 0.1 | 0.0 | 0.11 | 0.04 | **2.9** |
| Costa Rica | 15 | – | –0.7 | –0.9 | –0.8 | –0.7 | –0.5 | –0.5 | –0.7 | –0.4 | 0.0 | 0.05 | 0.02 | **2.4** |
| Czech Republic | 28 | 0.3 | 0.6 | 1.1 | 0.2 | 0.1 | 0.0 | –0.3 | 0.0 | 0.2 | 0.0 | –0.10 | 0.03 | *–3.2* |
| Denmark | 28 | –0.1 | 0.0 | –0.2 | –0.1 | –0.1 | –0.2 | –0.2 | –0.2 | 0.0 | 0.0 | 0.01 | 0.01 | 0.8 |
| Ecuador | 15 | 1.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 | –0.08 | 0.03 | *–2.7* |
| Estonia | 16 | – | –2.2 | –1.0 | –0.9 | –0.8 | –0.8 | –0.8 | –0.9 | –0.7 | 0.0 | 0.15 | 0.03 | **4.3** |
| Finland | 28 | –0.4 | –0.3 | –0.1 | –0.1 | –0.1 | 0.0 | –0.1 | 0.0 | 0.0 | 0.0 | 0.03 | 0.01 | **3.1** |
| France | 28 | –0.3 | –0.3 | –0.3 | –0.2 | –0.2 | –0.4 | –0.8 | –0.8 | 0.1 | 0.0 | 0.01 | 0.03 | 0.2 |
| Germany | 28 | –0.7 | –0.6 | –0.7 | –0.2 | –0.1 | –0.8 | –0.7 | –0.6 | 0.2 | 0.0 | 0.06 | 0.04 | 1.5 |
| Greece | 28 | 0.3 | 0.1 | 0.7 | 0.8 | 1.0 | –0.1 | 0.3 | –0.1 | 0.1 | 0.0 | –0.04 | 0.05 | –0.7 |
| Hong Kong | 28 | –1.4 | –1.4 | 0.3 | 0.1 | 0.2 | 0.7 | –0.3 | –0.6 | 0.6 | 0.0 | 0.12 | 0.04 | **3.2** |
| Hungary | 28 | –0.9 | –0.9 | –0.4 | –0.4 | 0.2 | 0.2 | 0.0 | –0.3 | 0.0 | 0.0 | 0.03 | 0.04 | 0.8 |
| Iceland | 19 | –0.8 | –0.8 | –2.9 | –1.4 | –1.5 | –0.7 | 0.0 | –0.3 | –0.1 | 0.0 | 0.22 | 0.10 | **2.3** |
| India | 28 | 0.5 | 1.1 | 0.0 | 0.9 | 0.3 | –0.1 | 0.3 | 0.2 | 0.0 | 0.0 | 0.00 | 0.02 | –0.2 |
| Indonesia | 28 | 1.0 | 1.5 | 0.1 | 0.1 | –0.2 | –0.1 | 0.6 | –0.4 | –0.2 | 0.0 | –0.07 | 0.03 | *–2.7* |
| Ireland | 28 | 0.7 | 0.7 | 0.4 | 0.2 | –0.4 | –0.4 | –1.3 | –0.3 | –0.6 | 0.0 | –0.17 | 0.04 | *–3.9* |
| Israel | 28 | 1.5 | 1.8 | 1.2 | 0.0 | 0.6 | 1.2 | 1.4 | 0.5 | 0.9 | 0.0 | –0.10 | 0.06 | –1.6 |
| Italy | 28 | –0.9 | –0.8 | –0.7 | –0.5 | –0.5 | –0.2 | 0.2 | –0.1 | –0.3 | 0.0 | 0.09 | 0.03 | **3.5** |
| Japan | 28 | –0.3 | –0.3 | –1.5 | –1.9 | –1.4 | –0.3 | –0.8 | –1.0 | –1.3 | 0.0 | 0.02 | 0.03 | 0.5 |
| Jordan | 19 | – | 0.1 | –1.4 | –1.1 | –0.7 | –0.8 | –1.0 | –1.1 | –0.1 | 0.0 | 0.03 | 0.07 | 0.5 |
| Luxembourg | 16 | – | 0.8 | 0.7 | 0.5 | 1.0 | 1.2 | 1.0 | 0.6 | 0.0 | 0.0 | –0.02 | 0.06 | –0.3 |

| Trends 1995–2004 | Observations | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | Annual change | Standard error | *t*-statistics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Malaysia | 28 | 1.2 | 2.4 | 2.2 | 1.9 | 0.3 | 1.8 | 1.5 | 2.2 | 1.5 | 0.0 | –0.07 | 0.04 | *–1.9* |
| Mexico | 28 | –0.2 | –0.2 | 0.3 | 0.1 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.0 | 0.06 | 0.02 | **3.3** |
| Netherlands | 28 | 0.3 | 0.6 | 0.6 | 0.4 | 0.7 | 0.7 | 0.7 | 0.6 | 0.4 | 0.0 | –0.02 | 0.02 | –1.0 |
| New Zealand | 27 | –0.2 | –0.4 | –0.3 | –0.1 | –0.3 | –0.1 | –0.2 | –0.1 | –0.1 | 0.0 | 0.02 | 0.01 | 1.5 |
| Norway | 28 | –0.4 | –0.2 | –0.4 | –0.1 | –0.1 | –1.1 | –0.8 | 0.0 | –0.9 | 0.0 | –0.02 | 0.05 | –0.3 |
| Peru | 18 | –0.9 | 0.7 | 0.7 | 0.6 | 0.4 | –0.3 | 0.6 | 0.1 | 0.0 | 0.0 | –0.05 | 0.06 | –0.9 |
| Philippines | 28 | 1.1 | 1.0 | 1.7 | 1.3 | 3.2 | 1.2 | 0.7 | 0.7 | 1.0 | 0.0 | –0.06 | 0.03 | *–2.2* |
| Poland | 27 | 1.3 | 1.5 | 1.4 | 1.1 | 1.3 | 1.7 | 1.1 | 0.9 | 0.5 | 0.0 | –0.12 | 0.03 | *–3.4* |
| Portugal | 28 | –0.2 | 0.1 | 0.9 | 0.8 | 0.6 | 0.6 | 0.1 | 0.6 | –0.1 | 0.0 | –0.01 | 0.06 | –0.2 |
| Romania | 15 | 0.3 | 0.6 | –0.7 | –0.7 | –0.8 | –0.7 | 0.6 | 0.3 | –0.1 | 0.0 | 0.03 | 0.06 | 0.6 |
| Russia | 28 | –0.4 | –0.3 | –0.2 | 0.4 | 0.0 | 0.1 | 0.2 | 0.6 | 0.0 | 0.0 | 0.06 | 0.03 | **2.1** |
| Singapore | 27 | –0.1 | –0.1 | –0.2 | –0.3 | –0.1 | –0.2 | –0.3 | –0.1 | 0.1 | 0.0 | 0.00 | 0.01 | –0.4 |
| Slovakia | 21 | 0.7 | 0.7 | 0.5 | –0.1 | –1.2 | –0.8 | –0.3 | –0.8 | –0.2 | 0.0 | –0.03 | 0.05 | –0.6 |
| Slovenia | 18 | – | 0.4 | 0.2 | 0.4 | 0.3 | –0.5 | –0.8 | –0.4 | –0.3 | 0.0 | –0.14 | 0.07 | *–2.0* |
| South Africa | 28 | –0.7 | –0.2 | –0.6 | –0.4 | –0.9 | –0.8 | –0.8 | –0.8 | –0.7 | 0.0 | –0.04 | 0.03 | –1.2 |
| South Korea | 28 | 1.0 | 0.3 | –1.9 | –1.5 | –1.8 | –1.5 | –1.1 | 0.1 | 0.9 | 0.0 | 0.01 | 0.04 | 0.3 |
| Spain | 28 | –2.4 | –2.2 | 0.3 | 0.4 | 0.4 | 0.7 | 0.1 | 0.3 | 0.8 | 0.0 | 0.25 | 0.06 | **3.9** |
| Sweden | 28 | 0.1 | –0.1 | 0.1 | 0.0 | –0.5 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.01 | 0.02 | 0.6 |
| Switzerland | 28 | –0.1 | –0.3 | –0.2 | 0.0 | –0.3 | –0.2 | –0.7 | –0.2 | 0.0 | 0.0 | 0.02 | 0.03 | 0.6 |
| Taiwan | 28 | –1.5 | –2.5 | –1.1 | 0.0 | –0.7 | –0.8 | –0.3 | –1.7 | –1.0 | 0.0 | 0.07 | 0.03 | **2.4** |
| Thailand | 27 | 0.1 | –0.2 | –0.5 | –1.3 | –0.3 | –0.2 | –0.3 | –1.3 | –0.9 | 0.0 | 0.02 | 0.03 | 0.7 |
| Turkey | 28 | 0.7 | 0.4 | 0.4 | 0.4 | 0.6 | 0.7 | 0.2 | –0.2 | 0.1 | 0.0 | –0.07 | 0.03 | *–2.5* |
| Ukraine | 17 | 0.7 | 0.8 | 0.8 | 0.0 | 0.1 | 0.2 | 0.0 | 0.4 | 0.2 | 0.0 | –0.02 | 0.03 | –0.6 |
| United Kingdom | 28 | 0.4 | 0.4 | 0.3 | 0.2 | 0.1 | 0.3 | –0.2 | –0.1 | 0.2 | 0.0 | –0.05 | 0.02 | *–2.9* |
| USA | 27 | –0.5 | –0.5 | –0.4 | –0.5 | –0.8 | –0.3 | 0.2 | 0.4 | 0.3 | 0.0 | 0.00 | 0.02 | –0.2 |
| Venezuela | 28 | 0.6 | 0.1 | 0.4 | 0.2 | 0.5 | 0.4 | 0.1 | 0.3 | 0.2 | 0.0 | –0.03 | 0.02 | –1.5 |
| Vietnam | 17 | –0.9 | 0.6 | 1.3 | 0.9 | 1.3 | 1.1 | 0.1 | 1.2 | 1.0 | 0.0 | 0.03 | 0.04 | 0.7 |
| Zimbabwe | 16 | – | 1.6 | 0.2 | –0.2 | 0.2 | –0.3 | –0.8 | –0.4 | –0.8 | 0.0 | –0.17 | 0.06 | *–3.0* |

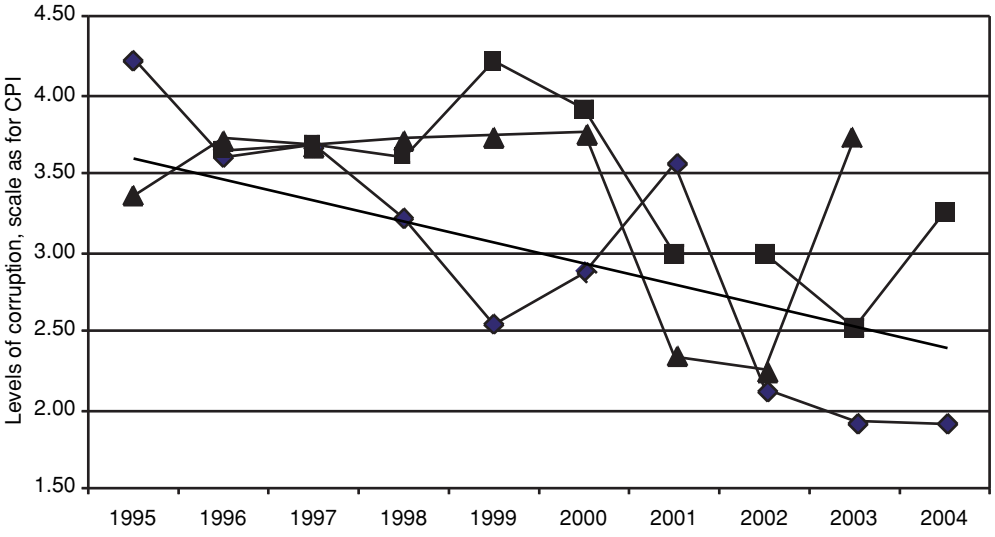


Figure 10.1: Levels of corruption, Argentina, individual data as reported by EIU, IMD and WEF

the *t*-statistics reported are emphasised in bold in the case of decreasing corruption, or italics in the case of increasing corruption.

The values for the annual change range between 0.25 and –0.17, which suggests that lowering perceived levels of corruption – achieving improvements in the CPI – is a long-term undertaking. A decade of substantial effort might improve the score by 1 point on a scale from 0 to 10. Only in rare instances will improvements be more pronounced.

Overall, our findings indicate that significant improvements between 1995 and 2004 occurred (in descending order of significance) in Estonia, Spain, Italy, Bulgaria, Mexico, Hong Kong, Colombia, Costa Rica, Taiwan, Australia, Iceland and Russia. A deterioration, on the other hand, was significant in Argentina, Ireland, Poland, Czech Republic, Zimbabwe, United Kingdom, Ecuador, Indonesia, Turkey, Canada and the Philippines.

This data mark a first approach to determining composite time-series information for a sample of 58 countries. Due to the short time horizon, the level of significance is still limited. As data on levels of corruption become available for future periods, the precision of the underlying measurement is likely to increase. The data presented here may prove useful in determining the causes and consequences of corruption, where research has until now been limited to cross-section analysis.

## Notes

1. Johann Graf Lambsdorff is chair in economic theory at the University of Passau and a research consultant to Transparency International, for whom he has coordinated and carried out the CPI since 1995.

2. Björnskov and Paldam determine time series by processing only the ordinal changes in the data over time, that is, whether a country improves its rank relative to others. With this approach, one-shot changes of a purely methodological nature play a minor role as compared to actual trend information. They conclude that generalised trust is about the only explanatory variable with significant impact. See C. Björnskov and M. Paldam, 'Corruption Trends' in J. Graf Lambsdorff, M. Schramm and M. Taube (eds) *The New Institutional Economics of Corruption – Norms, Trust, and Reciprocity* (London: Routledge, 2004), pp 59–75.
3. Minor variations in the phrasing of questions have taken place over time, however. For instance, in 2002–04, IMD asked respondents to assess whether 'bribing and corruption prevail or do not prevail in the economy'. Previously, respondents had been asked whether 'bribing and corruption prevail or do not prevail in the public sphere'. This change seemed to have little impact on the data, however, allowing inferences to be made over time.
4. Separately for each country, $k$, I seek to determine the coefficient $a_k$, which depicts the influence of a simple time trend ($\text{Trend}_{1995} = 1$, $\text{Trend}_{1996} = 2$ …) on the dependent variables, which are our source's values for country $k$. The coefficient $a_k$ thus resembles an estimate for the annual change in the CPI. All four subsequent regressions were run simultaneously.

$$\text{IMD}_{ik} = a_k \cdot \text{Trend}_i + b_{k,\,IMD} \cdot d_{IMD} + e_i$$
$$\text{WEF}_{ik} = a_k \cdot \text{Trend}_i + b_{k,WEF} \cdot d_{WEF} + e_i$$
$$\text{PERC}_{ik} = a_k \cdot \text{Trend}_i + b_{k,\,PERC} \cdot d_{PERC} + e_i$$
$$\text{EIU}_{i+1,k} = a_k \cdot \text{Trend}_i + b_{k,\,EIU} \cdot d_{EIU} + e_i.$$

We allow for our sources to differ systematically and capture this difference with the help of a dummy variable for each source, for example $d_{IMD}$. Thus, if IMD is more favourable in its assessment of country $k$ as compared to WEF, this is captured by the dummy and its associated coefficient, $b_{k,IMD}$. A random error term is added, $e_i$. The intention of this system of regressions was to find a joint trend in each of the sources for a given country $k$. OLS was employed for estimating the coefficients.

# 11 Corruption Perceptions Index 2005

*Johann Graf Lambsdorff*[1]

The Corruption Perceptions Index, now in its eleventh year, aims to provide data on extensive perceptions of corruption within countries. These perceptions enhance our understanding of real levels of corruption from one country to another. The CPI is a composite index, making use of surveys of business people and assessments by country analysts.

Overall, 16 sources were included in the 2005 CPI, originating from 10 independent institutions and using data compiled between 2003 and 2005. The sources used were: (1) Columbia University; (2) the Economist Intelligence Unit; (3) Freedom House; (4) Information International from Beirut (Lebanon); (5) the International Institute for Management Development (in Lausanne); (6) the Merchant International Group Limited (in London); (7) the Political and Economic Risk Consultancy (in Hong Kong); (8) the United Nations Economic Commission for Africa; (9) the World Economic Forum; (10) the World Markets Research Centre (in London). The number of countries in the CPI 2005 increased to 159 from 146 in 2004.

For an analysis of the medium-term corruption trends that can be discerned from the CPI data series, see Chapter 10 in this volume. A more detailed description of the methodology is available at www.transparency.org/surveys/index.html#cpi or at www.icgg.org.

Table 11.1: Corruption Perceptions Index 2005

| Country Rank | Country | 2005 CPI score[a] | Surveys used[b] | Standard deviation[c] | High–low range[d] | Confidence range[e] |
|---|---|---|---|---|---|---|
| 1 | Iceland | 9.7 | 8 | 0.2 | 9.3 – 9.8 | 9.5 – 9.7 |
| 2 | Finland | 9.6 | 9 | 0.2 | 9.3 – 9.8 | 9.5 – 9.7 |
| | New Zealand | 9.6 | 9 | 0.2 | 9.3 – 9.7 | 9.5 – 9.7 |
| 4 | Denmark | 9.5 | 10 | 0.3 | 8.7 – 9.8 | 9.3 – 9.6 |
| 5 | Singapore | 9.4 | 12 | 0.2 | 9.0 – 9.7 | 9.3 – 9.5 |
| 6 | Sweden | 9.2 | 10 | 0.3 | 8.7 – 9.6 | 9.0 – 9.3 |
| 7 | Switzerland | 9.1 | 9 | 0.3 | 8.5 – 9.4 | 8.9 – 9.2 |
| 8 | Norway | 8.9 | 9 | 0.6 | 7.9 – 9.5 | 8.5 – 9.1 |
| 9 | Australia | 8.8 | 13 | 0.8 | 6.7 – 9.5 | 8.4 – 9.1 |

| Country Rank | Country | 2005 CPI score[a] | Surveys used[b] | Standard deviation[c] | High–low range[d] | Confidence range[e] |
|---|---|---|---|---|---|---|
| 10 | Austria | 8.7 | 9 | 0.5 | 8.1 – 9.3 | 8.4 – 9.0 |
| 11 | Netherlands | 8.6 | 9 | 0.5 | 7.8 – 9.4 | 8.3 – 8.9 |
| | United Kingdom | 8.6 | 11 | 0.5 | 7.7 – 9.3 | 8.3 – 8.8 |
| 13 | Luxembourg | 8.5 | 8 | 0.7 | 7.7 – 9.6 | 8.1 – 8.9 |
| 14 | Canada | 8.4 | 11 | 0.9 | 6.5 – 9.4 | 7.9 – 8.8 |
| 15 | Hong Kong | 8.3 | 12 | 1.1 | 5.5 – 9.4 | 7.7 – 8.7 |
| 16 | Germany | 8.2 | 10 | 0.6 | 7.5 – 9.2 | 7.9 – 8.5 |
| 17 | USA | 7.6 | 12 | 1.0 | 5.3 – 8.5 | 7.0 – 8.0 |
| 18 | France | 7.5 | 11 | 0.8 | 5.5 – 9.0 | 7.0 – 7.8 |
| 19 | Belgium | 7.4 | 9 | 0.9 | 5.6 – 9.0 | 6.9 – 7.9 |
| | Ireland | 7.4 | 10 | 1.0 | 5.5 – 8.7 | 6.9 – 7.9 |
| 21 | Chile | 7.3 | 10 | 0.9 | 5.5 – 8.7 | 6.8 – 7.7 |
| | Japan | 7.3 | 14 | 1.2 | 5.5 – 9.0 | 6.7 – 7.8 |
| 23 | Spain | 7.0 | 10 | 0.7 | 5.6 – 8.1 | 6.6 – 7.4 |
| 24 | Barbados | 6.9 | 3 | 1.2 | 5.7 – 8.1 | 5.7 – 7.3 |
| 25 | Malta | 6.6 | 5 | 1.6 | 5.1 – 9.0 | 5.4 – 7.7 |
| 26 | Portugal | 6.5 | 9 | 1.2 | 5.0 – 7.8 | 5.9 – 7.1 |
| 27 | Estonia | 6.4 | 11 | 1.1 | 5.1 – 9.0 | 6.0 – 7.0 |
| 28 | Israel | 6.3 | 10 | 1.2 | 4.2 – 8.5 | 5.7 – 6.9 |
| | Oman | 6.3 | 5 | 1.5 | 4.2 – 8.0 | 5.2 – 7.3 |
| 30 | United Arab Emirates | 6.2 | 6 | 1.4 | 4.5 – 8.2 | 5.3 – 7.1 |
| 31 | Slovenia | 6.1 | 11 | 1.2 | 4.8 – 8.7 | 5.7 – 6.8 |
| 32 | Botswana | 5.9 | 8 | 1.4 | 4.4 – 8.1 | 5.1 – 6.7 |
| | Qatar | 5.9 | 5 | 0.6 | 5.5 – 6.9 | 5.6 – 6.4 |
| | Taiwan | 5.9 | 14 | 1.0 | 3.7 – 7.7 | 5.4 – 6.3 |
| | Uruguay | 5.9 | 6 | 0.6 | 5.5 – 6.9 | 5.6 – 6.4 |
| 36 | Bahrain | 5.8 | 6 | 0.7 | 4.7 – 6.9 | 5.3 – 6.3 |
| 37 | Cyprus | 5.7 | 5 | 0.5 | 4.9 – 6.2 | 5.3 – 6.0 |
| | Jordan | 5.7 | 10 | 1.0 | 3.4 – 6.9 | 5.1 – 6.1 |
| 39 | Malaysia | 5.1 | 14 | 1.2 | 3.4 – 8.0 | 4.6 – 5.6 |
| 40 | Hungary | 5.0 | 11 | 0.5 | 4.1 – 5.7 | 4.7 – 5.2 |
| | Italy | 5.0 | 9 | 0.8 | 4.1 – 6.2 | 4.6 – 5.4 |
| | South Korea | 5.0 | 12 | 0.7 | 3.8 – 5.8 | 4.6 – 5.3 |
| 43 | Tunisia | 4.9 | 7 | 1.1 | 3.7 – 6.9 | 4.4 – 5.6 |
| 44 | Lithuania | 4.8 | 8 | 0.6 | 4.0 – 5.5 | 4.5 – 5.1 |
| 45 | Kuwait | 4.7 | 6 | 1.0 | 3.4 – 5.7 | 4.0 – 5.2 |
| 46 | South Africa | 4.5 | 11 | 0.6 | 3.4 – 5.6 | 4.2 – 4.8 |
| 47 | Czech Republic | 4.3 | 10 | 1.4 | 2.7 – 7.7 | 3.7 – 5.1 |
| | Greece | 4.3 | 9 | 0.8 | 3.7 – 5.7 | 3.9 – 4.7 |
| | Namibia | 4.3 | 8 | 1.0 | 3.4 – 6.2 | 3.8 – 4.9 |

Table 11.1: Corruption Perceptions Index 2005 *continued*

| Country Rank | Country | 2005 CPI score[a] | Surveys used[b] | Standard deviation[c] | High–low range[d] | Confidence range[e] |
|---|---|---|---|---|---|---|
| | Slovakia | 4.3 | 10 | 1.0 | 3.2 – 5.7 | 3.8 – 4.8 |
| 51 | Costa Rica | 4.2 | 7 | 0.9 | 3.4 – 5.5 | 3.7 – 4.7 |
| | El Salvador | 4.2 | 6 | 1.1 | 2.6 – 5.5 | 3.5 – 4.8 |
| | Latvia | 4.2 | 7 | 0.7 | 3.6 – 5.5 | 3.8 – 4.6 |
| | Mauritius | 4.2 | 6 | 1.2 | 2.5 – 5.7 | 3.4 – 5.0 |
| 55 | Bulgaria | 4.0 | 8 | 1.1 | 2.7 – 5.6 | 3.4 – 4.6 |
| | Colombia | 4.0 | 9 | 0.8 | 2.7 – 5.6 | 3.6 – 4.4 |
| | Fiji | 4.0 | 3 | 1.0 | 3.4 – 5.1 | 3.4 – 4.6 |
| | Seychelles | 4.0 | 3 | 0.4 | 3.5 – 4.2 | 3.5 – 4.2 |
| 59 | Cuba | 3.8 | 4 | 1.6 | 1.7 – 5.5 | 2.3 – 4.7 |
| | Thailand | 3.8 | 13 | 0.6 | 2.6 – 4.7 | 3.5 – 4.1 |
| | Trinidad and Tobago | 3.8 | 6 | 1.0 | 2.7 – 5.5 | 3.3 – 4.5 |
| 62 | Belize | 3.7 | 3 | 0.4 | 3.4 – 4.1 | 3.4 – 4.1 |
| | Brazil | 3.7 | 10 | 0.5 | 2.7 – 4.4 | 3.5 – 3.9 |
| 64 | Jamaica | 3.6 | 6 | 0.3 | 3.4 – 4.1 | 3.4 – 3.8 |
| 65 | Ghana | 3.5 | 8 | 0.8 | 2.6 – 5.1 | 3.2 – 4.0 |
| | Mexico | 3.5 | 10 | 0.5 | 2.7 – 4.5 | 3.3 – 3.7 |
| | Panama | 3.5 | 7 | 0.8 | 2.6 – 5.1 | 3.1 – 4.1 |
| | Peru | 3.5 | 7 | 0.6 | 2.6 – 4.1 | 3.1 – 3.8 |
| | Turkey | 3.5 | 11 | 1.0 | 2.2 – 5.3 | 3.1 – 4.0 |
| 70 | Burkina Faso | 3.4 | 3 | 0.7 | 2.7 – 4.2 | 2.7 – 3.9 |
| | Croatia | 3.4 | 7 | 0.4 | 3.0 – 4.2 | 3.2 – 3.7 |
| | Egypt | 3.4 | 9 | 0.8 | 2.3 – 5.1 | 3.0 – 3.9 |
| | Lesotho | 3.4 | 3 | 0.8 | 2.6 – 4.1 | 2.6 – 3.9 |
| | Poland | 3.4 | 11 | 1.0 | 2.5 – 5.7 | 3.0 – 3.9 |
| | Saudi Arabia | 3.4 | 5 | 1.0 | 2.0 – 4.5 | 2.7 – 4.1 |
| | Syria | 3.4 | 5 | 1.1 | 2.2 – 5.1 | 2.8 – 4.2 |
| 77 | Laos | 3.3 | 3 | 2.0 | 2.1 – 5.5 | 2.1 – 4.4 |
| 78 | China | 3.2 | 14 | 0.6 | 2.2 – 4.1 | 2.9 – 3.5 |
| | Morocco | 3.2 | 8 | 0.7 | 2.2 – 4.1 | 2.8 – 3.6 |
| | Senegal | 3.2 | 6 | 0.6 | 2.5 – 4.2 | 2.8 – 3.6 |
| | Sri Lanka | 3.2 | 7 | 0.7 | 2.2 – 4.1 | 2.7 – 3.6 |
| | Suriname | 3.2 | 3 | 1.0 | 2.2 – 4.1 | 2.2 – 3.6 |
| 83 | Lebanon | 3.1 | 4 | 0.4 | 2.7 – 3.5 | 2.7 – 3.3 |
| | Rwanda | 3.1 | 3 | 1.7 | 2.1 – 5.1 | 2.1 – 4.1 |
| 85 | Dominican Republic | 3.0 | 6 | 0.8 | 2.0 – 4.2 | 2.5 – 3.6 |
| | Mongolia | 3.0 | 4 | 0.8 | 2.2 – 4.2 | 2.4 – 3.6 |
| | Romania | 3.0 | 11 | 0.9 | 2.0 – 5.1 | 2.6 – 3.5 |
| 88 | Armenia | 2.9 | 4 | 0.5 | 2.4 – 3.4 | 2.5 – 3.2 |

| Country Rank | Country | 2005 CPI score[a] | Surveys used[b] | Standard deviation[c] | High–low range[d] | Confidence range[e] |
|---|---|---|---|---|---|---|
| | Benin | 2.9 | 5 | 1.3 | 1.7 – 5.1 | 2.1 – 4.0 |
| | Bosnia and Herzegovina | 2.9 | 6 | 0.4 | 2.4 – 3.4 | 2.7 – 3.1 |
| | Gabon | 2.9 | 4 | 1.0 | 2.1 – 4.1 | 2.1 – 3.6 |
| | India | 2.9 | 14 | 0.5 | 2.1 – 3.5 | 2.7 – 3.1 |
| | Iran | 2.9 | 5 | 0.8 | 1.7 – 3.5 | 2.3 – 3.3 |
| | Mali | 2.9 | 8 | 1.2 | 1.5 – 5.1 | 2.3 – 3.6 |
| | Moldova | 2.9 | 5 | 1.1 | 1.9 – 4.6 | 2.3 – 3.7 |
| | Tanzania | 2.9 | 8 | 0.5 | 2.1 – 3.5 | 2.6 – 3.1 |
| 97 | Algeria | 2.8 | 7 | 0.7 | 2.0 – 4.2 | 2.5 – 3.3 |
| | Argentina | 2.8 | 10 | 0.6 | 1.8 – 3.5 | 2.5 – 3.1 |
| | Madagascar | 2.8 | 5 | 1.2 | 1.7 – 4.2 | 1.9 – 3.7 |
| | Malawi | 2.8 | 7 | 0.9 | 2.0 – 4.6 | 2.3 – 3.4 |
| | Mozambique | 2.8 | 8 | 0.6 | 2.1 – 3.5 | 2.4 – 3.1 |
| | Serbia and Montenegro | 2.8 | 7 | 0.7 | 2.2 – 4.1 | 2.5 – 3.3 |
| 103 | Gambia | 2.7 | 7 | 0.7 | 1.7 – 3.9 | 2.3 – 3.1 |
| | Macedonia | 2.7 | 7 | 0.7 | 2.2 – 4.1 | 2.4 – 3.2 |
| | Swaziland | 2.7 | 3 | 0.7 | 2.0 – 3.4 | 2.0 – 3.1 |
| | Yemen | 2.7 | 5 | 0.5 | 2.2 – 3.6 | 2.4 – 3.2 |
| 107 | Belarus | 2.6 | 5 | 1.4 | 1.7 – 5.1 | 1.9 – 3.8 |
| | Eritrea | 2.6 | 3 | 1.3 | 1.7 – 4.2 | 1.7 – 3.5 |
| | Honduras | 2.6 | 7 | 0.6 | 1.6 – 3.5 | 2.2 – 3.0 |
| | Kazakhstan | 2.6 | 6 | 0.8 | 1.8 – 4.1 | 2.2 – 3.2 |
| | Nicaragua | 2.6 | 7 | 0.4 | 2.1 – 3.0 | 2.4 – 2.8 |
| | Palestine | 2.6 | 3 | 0.5 | 2.1 – 3.1 | 2.1 – 2.8 |
| | Ukraine | 2.6 | 8 | 0.3 | 2.2 – 3.0 | 2.4 – 2.8 |
| | Vietnam | 2.6 | 10 | 0.6 | 1.7 – 3.5 | 2.3 – 2.9 |
| | Zambia | 2.6 | 7 | 0.5 | 2.1 – 3.4 | 2.3 – 2.9 |
| | Zimbabwe | 2.6 | 7 | 0.8 | 1.4 – 3.6 | 2.1 – 3.0 |
| 117 | Afghanistan | 2.5 | 3 | 1.1 | 1.6 – 3.7 | 1.6 – 3.2 |
| | Bolivia | 2.5 | 6 | 0.5 | 2.0 – 3.5 | 2.3 – 2.9 |
| | Ecuador | 2.5 | 6 | 0.6 | 1.9 – 3.5 | 2.2 – 2.9 |
| | Guatemala | 2.5 | 7 | 0.6 | 1.7 – 3.5 | 2.1 – 2.8 |
| | Guyana | 2.5 | 3 | 0.4 | 2.0 – 2.7 | 2.0 – 2.7 |
| | Libya | 2.5 | 4 | 0.7 | 1.8 – 3.4 | 2.0 – 3.0 |
| | Nepal | 2.5 | 4 | 0.7 | 1.7 – 3.4 | 1.9 – 3.0 |
| | Philippines | 2.5 | 13 | 0.6 | 1.5 – 3.5 | 2.3 – 2.8 |
| | Uganda | 2.5 | 8 | 0.5 | 2.0 – 3.5 | 2.2 – 2.8 |
| 126 | Albania | 2.4 | 3 | 0.4 | 2.1 – 2.8 | 2.1 – 2.7 |
| | Niger | 2.4 | 4 | 0.3 | 2.1 – 2.7 | 2.2 – 2.6 |

Table 11.1: Corruption Perceptions Index 2005 *continued*

| Country Rank | Country | 2005 CPI score[a] | Surveys used[b] | Standard deviation[c] | High–low range[d] | Confidence range[e] |
|---|---|---|---|---|---|---|
| | Russia | 2.4 | 12 | 0.3 | 1.9 – 3.0 | 2.3 – 2.6 |
| | Sierra Leone | 2.4 | 3 | 0.5 | 2.1 – 3.0 | 2.1 – 2.7 |
| 130 | Burundi | 2.3 | 3 | 0.3 | 2.1 – 2.7 | 2.1 – 2.5 |
| | Cambodia | 2.3 | 4 | 0.5 | 1.7 – 2.7 | 1.9 – 2.5 |
| | Congo, Republic | 2.3 | 4 | 0.4 | 2.0 – 3.0 | 2.1 – 2.6 |
| | Georgia | 2.3 | 6 | 0.5 | 1.7 – 2.7 | 2.0 – 2.6 |
| | Kyrgyzstan | 2.3 | 5 | 0.4 | 1.9 – 2.7 | 2.1 – 2.5 |
| | Papua New Guinea | 2.3 | 4 | 0.5 | 1.7 – 2.7 | 1.9 – 2.6 |
| | Venezuela | 2.3 | 10 | 0.2 | 2.0 – 2.5 | 2.2 – 2.4 |
| 137 | Azerbaijan | 2.2 | 6 | 0.5 | 1.7 – 3.0 | 1.9 – 2.5 |
| | Cameroon | 2.2 | 6 | 0.4 | 1.8 – 2.7 | 2.0 – 2.5 |
| | Ethiopia | 2.2 | 8 | 0.4 | 1.7 – 2.8 | 2.0 – 2.5 |
| | Indonesia | 2.2 | 13 | 0.4 | 1.7 – 3.3 | 2.1 – 2.5 |
| | Iraq | 2.2 | 4 | 1.0 | 1.4 – 3.6 | 1.5 – 2.9 |
| | Liberia | 2.2 | 3 | 0.1 | 2.1 – 2.4 | 2.1 – 2.3 |
| | Uzbekistan | 2.2 | 5 | 0.2 | 2.0 – 2.5 | 2.1 – 2.4 |
| 144 | Congo, Democratic Republic | 2.1 | 4 | 0.4 | 1.6 – 2.5 | 1.8 – 2.3 |
| | Kenya | 2.1 | 8 | 0.5 | 1.4 – 3.0 | 1.8 – 2.4 |
| | Pakistan | 2.1 | 7 | 0.7 | 1.3 – 3.4 | 1.7 – 2.6 |
| | Paraguay | 2.1 | 7 | 0.4 | 1.6 – 2.7 | 1.9 – 2.3 |
| | Somalia | 2.1 | 3 | 0.4 | 1.6 – 2.4 | 1.6 – 2.2 |
| | Sudan | 2.1 | 5 | 0.2 | 1.7 – 2.3 | 1.9 – 2.2 |
| | Tajikistan | 2.1 | 5 | 0.4 | 1.7 – 2.7 | 1.9 – 2.4 |
| 151 | Angola | 2.0 | 5 | 0.2 | 1.6 – 2.2 | 1.8 – 2.1 |
| 152 | Cote d'Ivoire | 1.9 | 4 | 0.3 | 1.6 – 2.2 | 1.7 – 2.1 |
| | Equatorial Guinea | 1.9 | 3 | 0.3 | 1.6 – 2.2 | 1.6 – 2.1 |
| | Nigeria | 1.9 | 9 | 0.3 | 1.4 – 2.2 | 1.7 – 2.0 |
| 155 | Haiti | 1.8 | 4 | 0.5 | 1.4 – 2.5 | 1.5 – 2.1 |
| | Myanmar | 1.8 | 4 | 0.2 | 1.6 – 2.2 | 1.7 – 2.0 |
| | Turkmenistan | 1.8 | 4 | 0.2 | 1.6 – 2.2 | 1.7 – 2.0 |
| 158 | Bangladesh | 1.7 | 7 | 0.5 | 1.0 – 2.4 | 1.4 – 2.0 |
| | Chad | 1.7 | 6 | 0.6 | 1.0 – 2.7 | 1.3 – 2.1 |

a. '2005 CPI score' relates to perceptions of the degree of corruption as seen by business people, academics and risk analysts, and ranges between 10 (highly clean) and 0 (highly corrupt).
b. 'Surveys used' refers to the number of surveys that assessed a country's performance. A total of 16 surveys were used from 10 independent institutions, and at least three surveys were required for a country to be included in the CPI.

c. 'Standard deviation' indicates differences in the values given by the sources: the greater the standard deviation, the greater the differences in perceptions of a country among the sources.
d. 'High–low range' provides the highest and lowest values given by the different sources.
e. 'Confidence range' provides a range of possible values of the CPI score. This reflects how a country's score may vary, depending on measurement precision. Nominally, with 5 per cent probability when few sources are available, an unbiased estimate of the mean coverage probability is lower than the nominal value of 90 per cent. It is 65.3 per cent for 3 sources; 78.4 per cent for 5 sources; 80.2 per cent for 6 sources and 81.8 per cent for 7 sources.

## Note

1. Johann Graf Lambsdorff is chair in economic theory at the University of Passau (Germany) and a research consultant to Transparency International, for whom he has coordinated and carried out the CPI since 1995.

# 12 Governance matters IV: new data, new challenges

*Daniel Kaufmann, Aart Kraay and Massimo Mastruzzi*[1]

In this new study, we present a set of governance indicators covering 209 countries over the period 1996–2004. For 2004, these indicators are based on 352 different underlying variables measuring perceptions of a wide range of governance issues.[2] The variables are drawn from 32 separate data sources constructed by 30 different organisations worldwide. The indicators that capture the six key dimensions of institutional quality or governance are as follows: voice and accountability, political stability and lack of violence, government effectiveness, regulatory quality, rule of law and control of corruption.

The precision of the aggregate governance indicators in this updated analysis has increased since we have substantially increased the number of sources and individual variables used in the aggregate indices. We do stress, however, that comparisons across countries and across time should be treated with caution since the margins of error are not negligible. These margins of error are not unique to the perceptions-based measures of governance we use, but are an important feature of any measure of governance, objective or subjective.[3]

## Is there an economic development dividend for better governance, or are governance improvements mostly a by-product of higher incomes?

There is by now a strong consensus among both academics and policy-makers that good governance provides the fundamental basis for economic development. Academic research has focused on the effects of institutional quality on growth in the long run, noting that there is a strong causal impact of institutional quality on per capita incomes worldwide. Figure 12.1 shows a representative set of estimates of this 'development dividend' of good governance. These estimates suggest that a realistic one-standard-deviation improvement in governance would raise incomes in the long run by about two- to threefold.[4] Of course, there is variation around these relationships, since governance is not the only thing that matters for development – but it certainly is a very important factor deserving policy-makers' attention.

Given the strong positive effect of governance on development, and its importance for effective aid delivery, it is a matter of considerable concern that governance performance in sub-Saharan Africa is on average quite weak. Altogether, 38 out of 46 countries in the region lie in the bottom-left quadrant of the graph, meaning that they are both

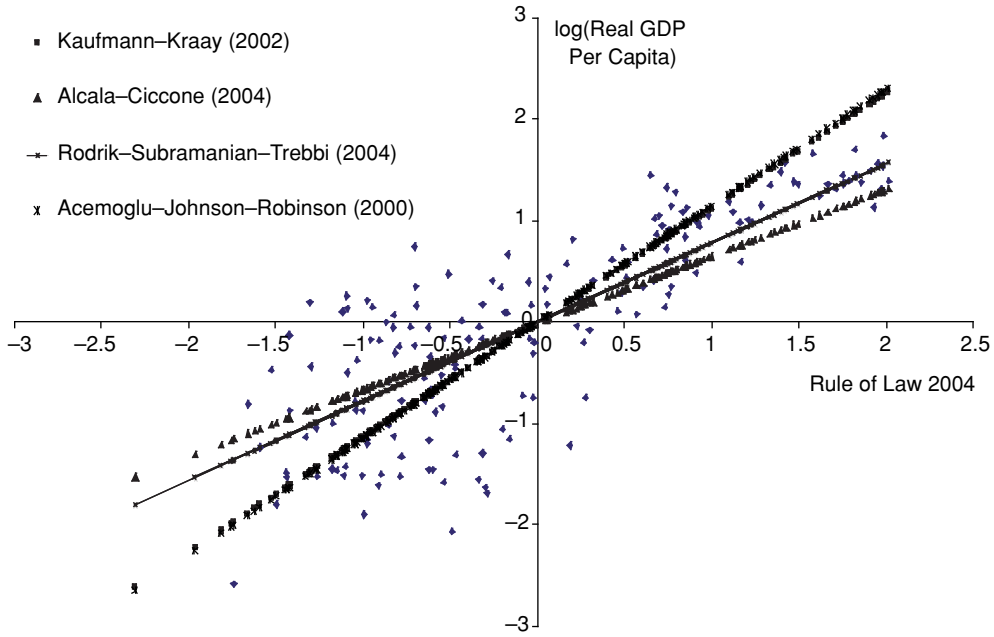


Figure 12.1: Governance indicators, 1996–2004

poorer than the world average and also exhibit worse governance than the world average. Some observers have argued that we should discount the poor governance performance of the region based on the fact that these countries have very low income levels – arguing that good governance costs money to provide. Yet recent research provides very little evidence in support of the proposition that poor governance in Africa is attributable to poverty. Rather, most of the causality is in the opposite direction, from better governance to better development outcomes.

## Is governance in some countries improving and how do we know that a significant change has actually taken place?

Reformers in many governments as well as civil society and investors increasingly view governance as key for development and the investment climate, which in turn has increased the demand for monitoring the quality of governance in a country over time. Further, aid donors have also come to the view that aid flows have a stronger impact on development in countries with good institutional quality.

In light of this, it is important to measure trends over time, as well as levels of governance. Our new indicators now span an eight-year period from 1996 to 2004, which is sufficiently long to begin looking for meaningful trends in governance. Over the eight-year period, we find that in about 10 per cent of countries we can be highly confident (at the 90 per cent significance level) that governance has changed substantially, while at a lower 75 per cent significance level, roughly 20 per cent of all observed changes

stand out as significant.[5] Importantly, we show that there is a great deal of agreement among our many data sources about the direction of change in governance in these countries. Overall this reminds us that, while in general institutional quality changes only gradually, there are also countries where one can point to sharp improvements or deteriorations over an eight-year period. This finding is of particular interest, given the common perception that while deterioration in a particular country can take place rather quickly, improvements are always very slow and incremental.

For instance, since 1996 there has been significant improvement in 'voice and accountability' in a number of countries, such as in Bosnia, Croatia, Serbia, Ghana, Indonesia, Sierra Leone, Slovak Republic and Peru, while a significant deterioration has taken place in countries such as the Ivory Coast, Zimbabwe, Kyrgyz Republic, Nepal, Haiti and Israel. With these aggregate indicators it is also possible to ascertain that some countries have experienced significant changes in briefer time spans, such as the case of the major improvement in the 'voice' variable for Senegal, Turkey and Nigeria during 1998–2004, or its deterioration in Pakistan, Belarus, Russia and Venezuela.

In general, it is of concern that there is little evidence of systematic improvements in regional averages for governance in most regions, including Africa. However, new governance indicators for trends in three dimensions of governance for the period 1996–2004 in Africa show that roughly as many countries show declines in governance as show improvements. Focusing only on those changes that are sufficiently large as to suggest that there are significant trends in institutional quality, the story is much the same: as many countries show significant improvements as declines.

## Looking ahead

We argue that governance *can* be measured, using a variety of types of data, both the subjective information on which we rely as well as more objective indicators. But it is essential that indicators on governance and investment climate take margins of error into account and are complemented with in-depth in-country governance diagnostics, based on micro-surveys of households, firms, and public officials within the country. The lessons being drawn from these combined aggregate and micro datasets point to the importance of moving concretely to the next stage of governance reforms.

Given the lack of worldwide progress on governance, coupled with its importance for development, a case can be made for redoubling our analysis of this connection, as well as for questioning the effectiveness of some traditional approaches to improving governance, such as creating additional anti-corruption commissions and laws. In particular, the importance of political factors (including 'state capture' and political commitment from the top) has been underplayed, as have many 'second generation' institutional reforms supporting political, economic and financial transparency. Examples include natural resource revenue transparency mechanisms, disclosure of assets by politicians, voting records of parliamentarians, political campaign contributions, and fiscal accounts.

## Notes

1. Daniel Kaufmann is the director for global governance and regional learning at the World Bank Institute, United States. Contact: dkaufmann@worldbank.org. Aart Kraay is a lead economist in the development research group at the World Bank. Contact: akraay@worldbank.org. Massimo Mastruzzi is a research analyst at the World Bank. Contact: mmastruzzi@worldbank.org. The views expressed here are the authors' and do not necessarily reflect the official position of the World Bank, its executive directors, or the countries they represent.
2. For the full paper, see www.worldbank.org/wbi/governance/pubs/govmatters4.html. The data and a graphical interface are available at www.worldbank.org/wbi/governance/govdata/
3. For more in-depth discussions of the issues of margins of error and the usefulness of perceptions-based measures, see our paper in the *Global Corruption Report 2004*, pp. 302–6.
4. The estimates come from Alcala and Ciccone (2004), Acemoglu, Johnson and Robinson (2001), Kaufmann and Kraay (2002), and Rodrik, Subramanian and Trebbi (2004). References available in the full paper at: www.worldbank.org/wbi/governance/pubs/govmatters4.html
5. Nine statistically significant changes per indicator were found using a 'rule of thumb' labelling of those countries for which the change in estimated governance over the 1996–2004 period is sufficiently large that the 90 per cent confidence intervals for governance in the two periods do not overlap. These were compared with a dynamic formal statistical model, which turned up more or less the same set of significant changes in governance, although it is important to note that the magnitude of these changes is substantially smaller in the formal dynamic model.

# 13 Corruption in the United States of America

*Edward Glaeser and Raven Saks*[1]

Corruption is not just something that happens to poor countries. Between 1990 and 2002, federal prosecutors in the United States convicted more than 10,000 government officials of acts of corruption including fraud, campaign-finance violations, and obstruction of justice. While corruption in the United States is bad news for the country, it is a mixed blessing for researchers, whose analysis of corruption has been hampered by lack of data. Most studies of corruption have relied on international opinion surveys that ask private individuals about the level of corruption in a nation. While these opinion surveys contain valuable information, they do not provide a full picture of corruption in a country.

As a complement to the international evidence, recent research on corruption in the United States examines the determinants of corruption using information on the number of public officials convicted for corruption in each of the 50 US states.[2] Because the individuals were all prosecuted by the same federal agency, the data can be compared across states, in contrast to the available international survey data.[3] Measuring corruption as the number of federal corruption convictions per capita, this research explores the state characteristics that predict corruption and the extent that corruption deters economic growth at the state level. Although these conviction data have been used in other contexts, prior research has not examined the effects of the level of income or ethnic heterogeneity on corruption, nor has it discussed the effect of corruption on economic growth.[4] Moreover, in contrast to earlier work, this research explores alternative identification strategies by examining changes in corruption over time and taking account of income and education using historical variables.

Table 13.1 lists the most and least corrupt states ranked by the average number of convictions per capita from 1976 to 2002. The ranking lines up reasonably well with general notions about the areas in the United States that are more corrupt, and is positively correlated with a 1998 survey of congressional reporters' perception of public corruption.[5]

The report finds that states with higher incomes and a larger share of college-educated population are less corrupt. In a simple OLS regression, the 1970 levels of education and income in each state are negatively correlated with the average corruption rate from 1976 to 2002 (see Table 13.2).[6] The same negative correlations exist when estimating the effect of the initial level of education and income on changes in corruption in each state over the past 25 years. Thus, this relationship cannot be attributed to omitted variables

that might lead to a spurious correlation among the levels of income, education and corruption across states.

Table 13.1: US states with most and least convictions per capita, 1976–2002

| Most convictions | | Least convictions | |
|---|---|---|---|
| State | Average annual convictions per 100,000 people | State | Average annual convictions per 100,000 people |
| Alaska | 0.643 | Colorado | 0.151 |
| Mississippi | 0.612 | Wisconsin | 0.150 |
| Louisiana | 0.513 | Nebraska | 0.133 |
| South Dakota | 0.472 | Utah | 0.130 |
| Tennessee | 0.464 | Iowa | 0.127 |
| Illinois | 0.458 | New Hampshire | 0.125 |
| New York | 0.439 | Minnesota | 0.121 |
| Oklahoma | 0.415 | Vermont | 0.115 |
| Montana | 0.414 | Washington | 0.104 |
| North Dakota | 0.398 | Oregon | 0.074 |

Table 13.2: Effect of income and education on average corruption rate, 1976–2002

| | OLS | | IV | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| Ln (Income) | –.203 | | –.470** | |
| | (.144) | | (.179) | |
| Share with 4+ years of college | | –2.91** | | –5.03** |
| | | (1.18) | | (2.27) |
| Adj. $R^2$ | .27 | .34 | .11 | .16 |
| No. Observations | 50 | 50 | 48 | 45 |

Note: All regressions also control for the following state characteristics in 1970: the logarithm of state population, the share of government employment, the share of urban population, dummy variables for each census region, and a constant. The instruments used in column 3 are the logarithm of median household income in 1940 and quadratic functions of longitude and latitude. The instrument used in column 4 is the fraction of church members who are Congregationalist from the 1890 census.

The magnitude of the coefficients reported in Table 13.2 suggest that a one standard deviation increase in income would lead to about one-sixth of a standard deviation decrease in corruption. The effect of education is larger, as a one standard deviation increase in the fraction of the population with a college degree would lead to a decrease in the corruption rate of one-half of a standard deviation.

An alternative interpretation of these results is that high income and education levels may be the result, rather than the cause, of lower corruption. To address this concern, the third and fourth columns of Table 13.2 use historical data to predict the levels of income and schooling in 1970. Income is predicted using a state's geographic location and income in 1940. The level of education in each state is predicted using the fraction of Congregationalist church members in 1890.[7] These factors are all strong predictors of income and education today, and yet are unlikely to have been influenced by the level of corruption at the end of the twentieth century. Using this method, the negative effect of income and education on corruption becomes even stronger.

The report also investigates several other theories concerning the determinants of corruption. Income inequality and racial heterogeneity are found to be associated with higher corruption rates.[8] In contrast, there is only weak evidence that states with larger local governments are more corrupt. Finally, the report examines the effect of corruption in 1976–1980 on economic growth during the subsequent 20 years. States with higher corruption rates have experienced lower income growth from 1980 to 2000, but there is no evidence that corruption has led to lower employment growth or lower housing values.

In general, the patterns documented in the data for US states reveal the same basic relationships that have been found using international evidence. This similarity is particularly interesting given that, here, corruption is measured using federal conviction data rather than the type of opinion survey that is the norm in the cross-country literature. This suggests that both methods can provide useful information concerning the amount of corruption in a particular location. A second important implication of this research is that improving the education system in a state or country can help reduce corruption in government.

## Notes

1. Edward Glaeser is a professor of economics at Harvard University and Raven Saks is an economist at the Federal Reserve Board of Governors. Contact information: eglaeser@harvard.edu and raven.e.saks@frb.gov. The views presented are solely those of the authors and do not necessarily represent those of the Federal Reserve Board or its staff.
2. Edward Glaeser and Raven E. Saks, 'Corruption in America', National Bureau of Economic Research Working Paper No. 10821, October 2004.
3. One disadvantage of using convictions to measure corruption is that the intensity of investigation or prosecution might be lower in places that are more corrupt. This concern is mitigated by the fact that these convictions are all prosecuted by the same federal agency. Nonetheless, this data may still provide an inaccurate view of the degree of corruption, if the Department of Justice (DOJ) treats richer or more corrupt states differently, or if the types of corruption not covered by the DOJ are more prevalent in richer states.
4. Daniel Berkowitz and Karen Clay, 'Initial Conditions, Institutional Dynamics and Economic Performance: Evidence from American States', William Davidson Institute Working Paper No. 615, 2003. Raymond Fisman and Robert Gatti, 'Decentralization and Corruption: Evidence from U.S. Federal Transfer Programs', *Public Choice* 113(1), 2002. Rajeev K. Goel and Michael A. Nelson, 'Corruption and Government Size: A Disaggregated Analysis', *Public Choice* 97(1–2), 1998.
5. Richard T. Boylan and Cheryl Long, 'A Survey of State House Reporters' Perception of Public Corruption', *State Politics and Policy Quarterly*, 2003.

6. Each regression includes the following 1970 state characteristics as additional controls: the logarithm of state population, the share of urban population, the fraction of employment in the government sector, and dummy variables for the four census regions.
7. Congregationalism was almost never a dominant religion during this time period, but it is generally associated with elites and their commitment to education. As a result, education developed more quickly in states with more Congregationalists and those states remain more educated today.
8. The hypothesis, associated with Paolo Mauro, 'Corruption and Growth', *Quarterly Journal of Economics*, MIT Press, vol. 110(3): 681–712, 1995, and Alberto Alesina, Reza Baqir and William Easterly, 'Redistributive Public Employment', *Journal of Urban Economics* 48: 219–41, 2002, is that ethnic heterogeneity increases corruption. As voters become more diverse along ethnic or income lines, then voting will inevitably focus on redistribution rather than on the honesty of government officials.

# 14 Transparency and its impact on financial fragility

*Saadia Zahidi*[1]

In recent decades, many countries have experienced some form of banking crisis, either small borderline crises or systemic ones, typically involving widespread bank insolvencies, liquidity squeezes and depositor withdrawals. The crises have been expensive, not only through their effects on government budgets and taxes, but also due to forgone economic output. The economic literature investigating the causes of banking crises has focused mainly on macroeconomic factors, such as growth rates and inflation, financial factors, such as liquidity and credit growth, and only more recently on the role of institutions. This work is an attempt to probe further into the role of institutions by examining the empirical relationship between financial fragility and the *transparency* of financial institutions.

While crises may erupt in a relatively short period of time, they are usually the result of long-term fundamental problems in a country's financial institutions. Weak, inefficient institutions lead to fragile financial systems, where a small event or trigger may lead to a large effect (that is, a full-blown crisis). The mechanism of a banking crisis becomes obvious if one recalls the fundamental characteristics of finance: information asymmetries, intertemporal trade and demandable debt. Providers of funds (lenders) have difficulties monitoring intermediaries, who in turn face the same problem with users of funds (borrowers). Those receiving funds know better how they will utilise them than providers, and this is further complicated by the exchange of money today for money in the future.[2]

As a result, banking systems with poor transparency are particularly vulnerable. Literature on the subject has shown that they can become increasingly fragile through two ways: first, investments (loans) are made on the basis of incorrect or misrepresented information, and second, once bad loans are discovered, there is a strong incentive to roll them over rather than to declare them as non-performing. Since banking crises can erupt where there are bad investments and mismatched balance sheets, we would predict that countries with poor transparency should be prone to a higher number of banking crises.

Using a multivariate logit model, the hypothesis that high levels of transparency (that is, high scores on the 'institutional' variables) significantly decrease the probability of a crisis when other factors are controlled for, was tested. The dependent variable, the banking crisis dummy, is equal to zero if there is no banking crisis, and it is equal to one if there is a crisis.[3] The set of control variables covers macroeconomic developments

that affect bank performance (the rate of growth of real GDP, the external terms of trade, the rate of inflation and the real short-term interest rate); characteristics of the banking system (vulnerability to sudden capital outflows, liquidity, exposure to the private sector and credit growth); and other relevant factors (financial liberalisation and GDP per capita).[4] Unique qualitative perceptions data[5] for 41 countries across a period of 11 years is used as a proxy for the transparency of institutions (see Table 14.1).

Table 14.1: Perceptions data on the transparency of institutions

| Variable name | Question detail |
|---|---|
| Corruption | Improper practices (such as bribing, corruption, and irregular payments): (1 = prevail in the public sphere; 7 = do not prevail in the public sphere) |
| Favouritism | When deciding upon policies and contracts, government officials (1 = usually favour well connected firms and individuals, 7 = are neutral among firms and individuals) |
| Independence of the judiciary | The judiciary in your country is independent from influences of members of government, citizens, or firms (1 = no, heavily influenced, 7 = yes, entirely independent) |
| Insider trading | Insider trading is not common in the domestic stock market (1 = strongly disagree; 7 = strongly agree) |
| Regulation of the financial system | Regulation and supervision of financial institutions in your country is among the world's most stringent (1 = strongly disagree; 7 = strongly agree) |

Transparency variables are indeed significant in explaining the probability and severity of banking crises, perhaps more so than several traditional explanatory variables. The clearly negative and significant relationship between transparency variables and banking crises remains robust to several specification changes. Some cautious but interesting insights can be obtained from the analysis undertaken in this research. Transparency variables consistently display far better significance levels than several of the control variables.[6] Second, we find that a one-unit increase in the scores for corruption, favouritism, judicial independence, insider trading and regulation decreases the *odds* in favour of a country having a banking crisis by 74 per cent, 86 per cent, 89 per cent, 69 per cent and 76 per cent respectively; whereas one-unit increases in inflation, credit ratio and the real interest rate increase the odds in favour of crises by 4–11 per cent, 2–4 per cent and 3–5 per cent, and one-unit increases in credit growth and GDP growth decrease the odds by 6–9 per cent and 12–26 per cent respectively (see Table 14.2). Clearly, transparency is important in preventing financial crises and the role of the judiciary appears to be particularly important. This is not surprising given the inherent need for contract enforcement in all areas of finance.

These results have substantial policy implications, providing support for strong national financial sector regulation, as well as global, standardised frameworks, such as those developed by the Bank of International Settlements.[7] Transparency in general

is indispensable to the financial sector, providing access, timeliness, relevance and quality, and developing institutional infrastructure, standards, auditing and accounting practices that promote transparency, implementing incentives for disclosure and installing countervailing regulations to minimise the perverse incentives generated by safety-net arrangements, is absolutely imperative.[8] The challenge lies in creating the type of public–private partnership and cooperation that are necessary for implementing effective regulation.

Table 14.2: Transparency variables explaining probability of banking crises

| Variable name | Percentage effect on the odds in favour of a crisis due to a one-unit increase in the variable |
|---|---|
| Corruption | –74 |
| Favouritism | –86 |
| Independence of the judiciary | –89 |
| Insider trading | –69 |
| Regulation of the financial system | –76 |
| Inflation | 4 to 11 |
| Credit ratio | 2 to 4 |
| Real interest rate | 3 to 5 |
| Credit growth | –6 to –9 |
| GDP growth | –12 to –26 |

## Notes

1. Saadia Zahidi is an economist at the World Economic Forum. This research was carried out at the Graduate Institute of International Studies in Geneva.
2. Charles Wyplosz, 'Globalized Financial Markets and Financial Crises', April 1998.
3. Gerard Caprio and Daniela Klingebiel, 'Database on Banking Crises', World Bank, October 2003. See: http://www1.worldbank.org/finance/html/sfd_home.html
4. These are taken from a previous study with a similar focus. Asli Demirguc-Kunt and Enrica Detragiache, 'The Determinants of Banking Crises in Developing and Developed Countries', IMF Staff Papers 45(1), March 1998.
5. World Economic Forum, *Global Competitiveness Reports 1992–2002*.
6. Having corrected for multicollinearity.
7. 'Core Principles for Effective Banking Supervision', developed by the Basel Committee on Banking Supervision at the Bank of International Settlements.
8. Daniel Kaufmann and Tara Vishwanath, 'Toward Transparency: New Approaches and their Application to Financial Markets', *World Bank Observer* 16(1), Spring 2001.

# 15 Budget transparency survey

*Pamela Gomez*[1]

As part of the global movement towards more open government, citizens around the world have become increasingly concerned with obtaining access to accurate, comprehensive, and timely information on the financial activities of their governments. This is not surprising. Comprehensive financial information, which should be disclosed in a country's budget documents, allows the public to evaluate a government's policy intentions, its policy priorities, and their implementation. Public access to such documents is essential to ensure both that government is financially accountable and that civil society can participate effectively in budget debates.

The International Budget Project (IBP) was established at the Washington, DC-based Center on Budget and Policy Priorities in 1997 to assist non-governmental organisations and researchers in developing and transitional countries in their efforts to analyse budget policies, to open budget processes and to strengthen budget-related institutions.

In 2004, the IBP published the findings of a pilot study to evaluate public access to budget information in 36 countries. The IBP, along with several partner organisations in developing countries, had designed a questionnaire, the Open Budget Questionnaire, to evaluate the public availability of budget documents at the central government level, the presentation of budget information in a manner suitable for policy analysis, and the extent to which public and legislative involvement in the budget debate is encouraged. The IBP expanded the project following the pilot in 2004, and will publish results from 60 countries in September 2006.

During the pilot phase of the project, civil society researchers from 36 developing and transitional countries completed the *Open Budget Questionnaire*. The questionnaire results were intended to offer an independent, non-governmental view of the state of budget transparency in the countries studied. All of the researchers who completed the questionnaire were from academic or other non-governmental organisations. One researcher (or one group of researchers within an organisation) from each of the countries represented was responsible for submitting a single questionnaire with the results for that country.

The questionnaire contained 122 questions. All of the questions were constructed with the intention that they should capture easily observable and replicable phenomena.[2] The questionnaire drew on the efforts of multilateral organisations for many of the criteria it used in evaluating best and good practice. Specifically, it used criteria from the Organisation for Economic Co-operation and Development's (OECD) *Best Practices for Budget Transparency*, the International Monetary Fund's (IMF) *Code of Good Practices on Fiscal Transparency*, and the International Organization of Supreme Auditing Institutions' (INTOSAI) *Lima Declaration of Guidelines on Auditing Precepts*.

## Findings from the questionnaire

Table 15.1 shows the questionnaire results. The researchers in the 36 countries studies found that in all but one of the countries studied, governments made their main policy document, the executive's budget proposal, available to the public. But lack of public access to other types of essential budget documents raised concerns. Nine of the 36

Table 15.1: Summary results by major category

| Country | Executive budget documents (%) | Country | Monitoring and evaluation reports (%) | Country | Public and legislative involvement (%) |
|---|---|---|---|---|---|
| Czech Republic | 86 | Slovenia | 99 | Slovenia | 86 |
| Slovenia | 86 | Poland | 97 | South Africa | 77 |
| Botswana | 84 | South Africa | 82 | Czech Republic | 65 |
| South Africa | 83 | Czech Republic | 76 | Poland | 63 |
| Poland | 79 | Russia | 74 | Brazil | 57 |
| Peru | 77 | Mexico | 70 | Uganda | 54 |
| Kenya | 72 | Kenya | 64 | Indonesia | 52 |
| Namibia | 68 | Peru | 64 | Romania | 51 |
| Jordan | 68 | Bulgaria | 57 | Peru | 49 |
| Ghana | 64 | Romania | 55 | Argentina | 49 |
| Azerbaijan | 64 | Georgia | 53 | Burkina Faso | 48 |
| Russia | 63 | Croatia | 51 | Mexico | 48 |
| Mexico | 62 | Brazil | 49 | Kenya | 46 |
| Brazil | 61 | Uganda | 48 | Costa Rica | 46 |
| Argentina | 61 | Jordan | 46 | Russia | 45 |
| Uganda | 59 | Indonesia | 45 | Bangladesh | 40 |
| India | 59 | El Salvador | 44 | Colombia | 38 |
| Bangladesh | 58 | Burkina Faso | 43 | India | 37 |
| El Salvador | 58 | Argentina | 42 | El Salvador | 37 |
| Colombia | 57 | Botswana | 42 | Croatia | 36 |
| Costa Rica | 56 | Bangladesh | 40 | Botswana | 36 |
| Nepal | 56 | Kazakhstan | 36 | Bulgaria | 34 |
| Burkina Faso | 56 | Colombia | 36 | Malawi | 33 |
| Malawi | 52 | Nicaragua | 34 | Namibia | 33 |
| Georgia | 52 | Ghana | 34 | Ghana | 33 |
| Romania | 51 | Nepal | 32 | Jordan | 31 |
| Kazakhstan | 48 | Costa Rica | 31 | Kazakhstan | 28 |
| Indonesia | 47 | Zambia | 31 | Azerbaijan | 27 |
| Bulgaria | 45 | India | 30 | Honduras | 25 |
| Honduras | 43 | Ecuador | 25 | Georgia | 24 |
| Zambia | 35 | Namibia | 14 | Nicaragua | 20 |
| Ecuador | 31 | Bolivia | 12 | Zambia | 19 |
| Croatia | 28 | Azerbaijan | 10 | Mongolia | 19 |
| Bolivia | 21 | Honduras | 7 | Bolivia | 18 |
| Nicaragua | 19 | Malawi | 6 | Ecuador | 14 |
| Mongolia | 0 | Mongolia | 0 | Nepal | 7 |
| Average | 56 | Average | 44 | Average | 40 |

Note: The shading groups countries according to their average score. Scores of 67 per cent or above generally indicate 'positive' practices, and scores of 50–66 per cent reflect 'mostly positive' practices. In contrast, scores of 33–49 per cent indicate 'mostly negative' practices, and scores of less than 33 per cent reflect 'negative' practices.

countries did not release routine reports during the year allowing for the monitoring of expenditure, revenue collection and borrowing. At the same time, 12 of the 36 countries did not make audit reports available to the public. (See Table 15.2.)

Table 15.2: Budget documents made available to the public

(out of 36 countries completing the questionnaire)

| | Number of countries | Percent of total |
|---|---|---|
| Pre-budget statement | 19 | 53 |
| Executive budget proposal | 35 | 97 |
| Citizens budget | 6 | 17 |
| In-year monitoring reports | 27 | 75 |
| Mid-year review | 17 | 47 |
| Year-end evaluation reports | 29 | 81 |
| Audit reports | 24 | 67 |

Significantly, the researchers found that many governments could substantially improve budget transparency in their countries by taking the simple step of releasing to the public documents they are already producing for internal use. The researchers found that in all of the countries that did not release routine monitoring reports except one – Namibia – these reports were in fact prepared, but only for internal use. Similarly, in the 12 countries that did not make audit reports available to the public, all of the countries except one – Nicaragua – were preparing the audits, but simply not releasing them to the public.

In addition to examining the public availability of the documents as noted above, the survey also evaluated the comprehensiveness of the content of the documents. Each country's performance for the executive's budget proposal, and for its monitoring and evaluation reports, are shown in the first two columns in Table 15.1. The third column shows the extent to which the country's executive makes available information and the legislature provides opportunities to facilitate public discourse and understanding of the budget.

The results from the pilot project included the following:[3]

- The countries surveyed fare best in the first of the three main areas examined: the executive's budget proposal. Documents related to the executive's budget are routinely released to the public and typically contain significant amounts of information on at least the budget year and the year before it.
- Far fewer countries report positive practices in the second area examined: issuing public reports that monitor the budget while it is being implemented or evaluate the budget once the fiscal year has been completed. Governments typically fall short of international best practices in this area. Without these documents, the public and civil society cannot easily assess budgetary outcomes, including how well public funds are being spent.
- The weakest scores, in most of the countries surveyed, concern the final area examined: efforts by the executive to facilitate public discourse and understanding

of the budget. Most executives fail to provide information to the public and to legislatures that can help make the budget (and the policies it embodies) more understandable. Without such information, a broad and informed debate on a nation's fiscal priorities is impossible. In addition, official avenues for legislative and public input, such as legislative hearings or public consultation periods, tend to be lacking.

The IBP made these results from the pilot study available in October 2004 to promote discussion of the study's methodology. Following the release, the IBP collected feedback on the study from academics, non-governmental organisations, public expenditure management experts, and international financial institutions and other organisations. The IBP used the feedback to refine the questionnaire and the study's methodology, and expects to have results from 60 countries available in September 2006.

## Notes

1. Pamela Gomez is an international policy analyst at the International Budget Project at the Center on Budget and Policy Priorities in Washington, DC.
2. Most of the questions on the questionnaire required the researcher to choose among five responses. Responses 'a' and 'b' reflected best or good practice regarding the subject matter of the question, 'c' and 'd' reflected poor practices, and 'e' reflected *not applicable*. For the purposes of aggregating the responses in the three major categories, an 'a' response was awarded a score of 100 per cent, 'b' was worth 67 per cent, 'c' was worth 33 per cent, and 'd' was marked as 0 per cent. Responses of 'e' *not applicable* were not considered in the scoring.
3. For full details of the study, please see the International Budget Project's website at http://www.internationalbudget.org/openbudgets/index.htm

# 16 Beyond the rhetoric: measuring revenue transparency in the oil and gas industry

*Elizabeth Lort-Phillips and Vanessa Herringshaw*[1]

There has been growing recognition that transparent disclosure of revenues from extractive industries is vital for responsible use of oil and gas and the avoidance of the 'resource curse'. This insight has been strongly endorsed by those committing to schemes such as the Extractive Industries Transparency Initiative (EITI).[2] But beyond the rhetoric, what concrete action has been taken to improve transparency in the oil and gas sectors?

Save the Children UK (SC UK) has been very proactive in tackling this question. In 2005, it created a framework for measuring revenue transparency and developed a set of indices to set transparency standards for key actors, to evaluate their current performance and to track progress over time. The standards can be readily incorporated into regulations, policies and guidelines relating to revenue transparency in the extractive industries, such as for reporting requirements, investor guidelines or company policies.

SC UK published two reports in 2005 measuring revenue transparency in the oil and gas sectors. The first report ranked 25 *companies* in terms of their performance in the disclosure of revenues paid to host governments by the oil and gas industries, based on their company-wide policies, their management systems and their transparency performance in six host countries – Nigeria, Angola, Azerbaijan, Indonesia, Timor Leste and Venezuela. The second report ranks 10 *home countries* (that is, countries in which companies are registered or raising finance) – the United Kingdom, the United States, Canada, France, the Netherlands, Italy, Norway, Australia, South Africa and Russia – according to their measures to regulate and support company reporting of revenue payments to host governments.

As the research relates to transparency and accountability, the methodology used to carry out both of these reports consisted largely of surveying data available in the public domain. This included websites, annual reports, statements of policy, press releases, accounting standards and financial regulations. Company performance was assessed in three categories: revenue payments transparency (disclosure of benefit streams from companies to host governments); supportive disclosure (disclosure of other information necessary to judge the accuracy of the revenue information and predict future revenues); and anti-corruption and whistleblowing measures. Home government performance was assessed in four categories: revenue payments transparency; supportive disclosure; access to information (from public, parastatal and private bodies); and the broad governance environment. The overall methodology was developed through consultation with a reference group involving government, civil society, investors and industry experts.

The report on companies found that the majority of companies were not disclosing revenue payments to host governments. More than half the companies scored zero on this category. Existing disclosure was mostly made known by geographic segment (such as a region, or 'rest of the world' category), which is of little use to citizens wishing to find out information on company payments to their governments. However, systematic disclosure across countries was shown to be possible, as Talisman disclosed royalties, taxes and bonuses paid in all countries of operation.

Some companies are disclosing some information in a few countries but this is usually limited and variable. For example, Shell had the highest country score for its progressive disclosure practices in Nigeria (82 per cent), yet its overall performance (29 per cent) was weakened by its lack of disclosure practices in Venezuela. Performance also varied within single countries between different companies. In Azerbaijan, only BP disclosed any payments to the government; eight other companies operating there have yet to do so. There was great variation between companies disclosing in Nigeria and Indonesia. This clearly shows that companies can do more in particular countries and that there is a need for them to take a globally systematic approach to improving their transparency. (See Figure 16.1.)

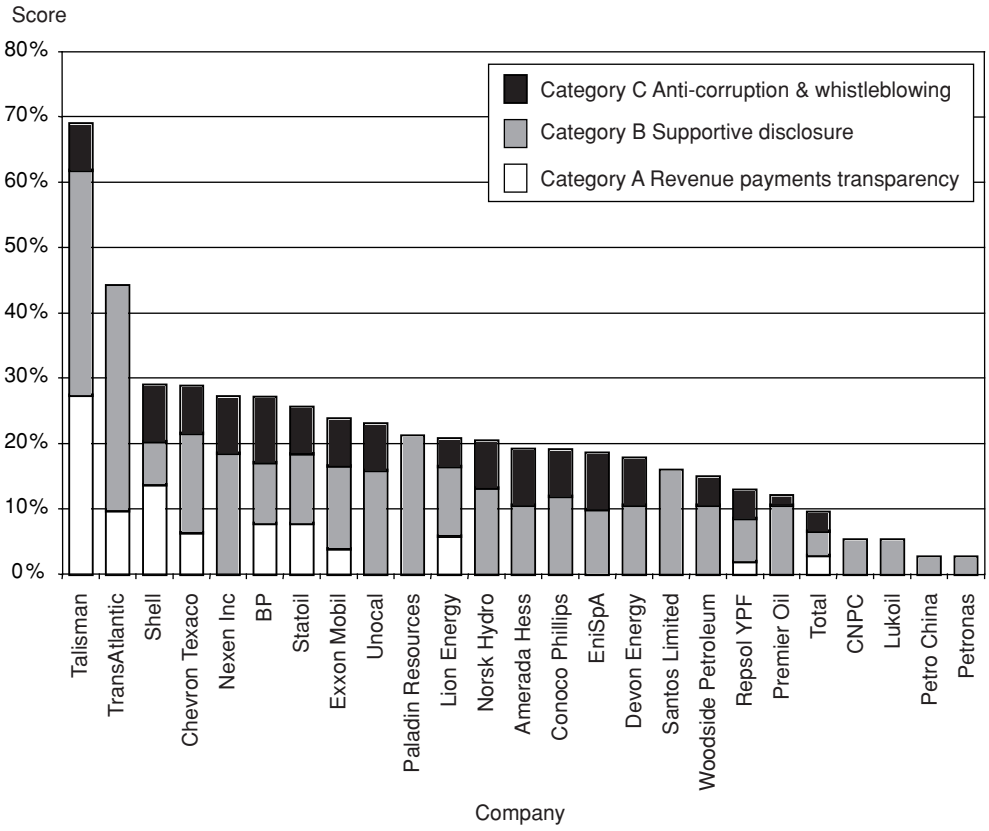


Figure 16.1: Overall company performance

Companies based in home countries with mandatory disclosure requirements lead in performance results on transparency. Canadian government disclosure requirements are stronger than the nine other governments assessed, and three of the top five companies were Canadian (Talisman, Nexen and TransAtlantic). Perhaps surprisingly, there was uneven transparency performance by the voluntary EITI signatories. Of the seven companies listed as EITI participants, only four publicly disclosed any payments to the governments. Total, Exxon and Repsol did not disclose in any of the countries researched. This poor performance illustrates the limitations of the voluntary process.

The assessment of home government action in supporting transparency in the oil and gas industries revealed disappointing performance, despite their stated commitments to transparency. Almost no home country had any requirement that companies disclose their revenues on a host country-by-country basis in their regulations on corporate reporting. (See Figure 16.2.)

As indicated above, overall leadership is shown by Canada, a non-EITI country, which is the only country with any requirement for disclosure of royalty payments at a host country level through its securities legislation. Leadership on access to information also came from a non-EITI country, South Africa, which had the most progressive law allowing access to private sector information 'where access is necessary for the protection or exercise of another right'. Furthermore, the research indicated that there was a distinct lack of 'joined-up' policies. Many countries reported a lack of coordination between different government departments about disclosure commitments in the extractive sector.

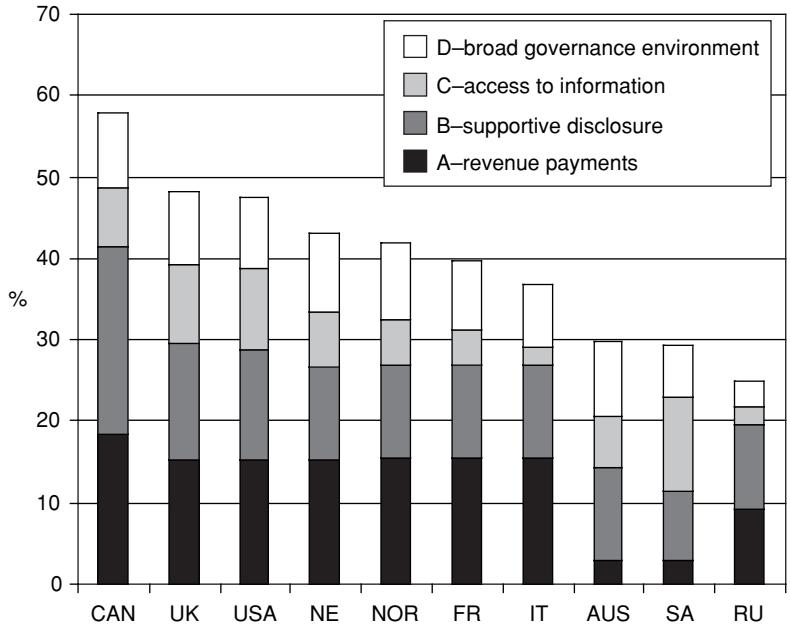


Figure 16.2: Overall home government performance

The findings of these reports produced some key policy recommendations. Home governments must require companies to publish what they pay to governments wherever they operate, commit to global standards for disclosure in the extractive industry and actively engage the EITI in the implementation of those standards. Companies too must move beyond the rhetoric and publish what they pay to governments wherever they operate on a country-by-country basis in a systematic way. Companies must lobby home governments to mainstream disclosure requirements into accounting and listing standards, actively participate in the EITI and work collaboratively with other actors to build disclosure agreements. This is important and advantageous, as such regulation would afford investment protection and ensure a more level playing field in the oil and gas markets.

For the full text of the reports, including key recommendations and standards for inclusion in policies and guidelines, see www.savethechildren.org.uk/measuring transparency.

## Notes

1. Elizabeth Lort-Phillips is a consultant with Save the Children UK. Vanessa Herringshaw is head of economic policy with Save the Children UK.
2. The EITI 'supports improved governance in resource-rich countries through the full publication and verification of company payments and government revenues from oil, gas and mining. Many countries are rich in oil, gas, and minerals and studies have shown that when governance is good, these can generate large revenues to foster economic growth and reduce poverty. However when governance is weak, they may instead cause poverty, corruption, and conflict – the so called "resource curse". The EITI aims to defeat this "curse" by improving transparency and accountability.' www.eitransparency.org

# 17 Benchmarking corporate reputation: an incentive for good anti-corruption practice

*Transparencia Mexicana*

The reputation of private companies is highly sensitive to news or suspicion of corrupt behaviour. The financial collapses of powerful corporations such as Enron and Parmalat are examples of the dire consequences companies face when their reputation is damaged by actions that are corrupt or that unfairly damage the interests of competitors or shareholders. Conversely, corporations that demonstrate positive good business practices and values in their relationships with their community and stakeholders can boast of a commitment to a less corrupt society. With this in mind, Transparencia Mexicana, the Mexican chapter of Transparency International, in collaboration with market research company Consulta-Mitofsky, developed a tool, the Mexican Corporate Reputation Index (MECRI), to highlight companies' good practices. The aim is to provide corporations with a positive incentive to enhance their reputation as well as information about which areas to improve, at the same time as generating public awareness about the reputations of major corporations operating in the country.

The MECRI is based on the opinions of a total of 32 managers and executives from the following professions: stockbrokers, publicists, economics analysts, financial risk analysts, external auditors, certifiers, civil servants, corporate lawyers and entrepreneurs.[1] Participants were required to be very well acquainted with the sectors and corporations under investigation, but were precluded from assessing corporations they had any kind of relationship with.

Respondents were asked which factors determine whether a company has a good or a bad reputation. Eight factors were selected on the basis of these responses: concern for the shareholders, investors, and partners; compliance with current laws and standards; service to customers and suppliers; environmental responsibility; respect for workers' rights; involvement with the community; nature and quality of relationships with competitors; and commitment to the development of Mexico. A closed question was asked about each of the areas of concern. For example: 'How well do you think the following companies treat their clients and providers? Very well (1)/ Well (2)/ Average (3)/ Badly (4)/ Very badly (5)'. The MECRI has a scale of values between one and zero: the higher the value, the better the standing of a firm's reputation.

The MECRI evaluated 108 corporations, which were selected on the basis of total revenues declared by the corporation. The companies are amongst the 500 largest Mexican corporations, as listed in *Expansión* magazine, and operate in one of the

following 12 industries: food and non-alcoholic beverages; higher education; automotive; pharmaceutical; alcohol and tobacco; self-service and department stores; public works and construction; financial services; information technology and telecommunications; mass media; tourism and transportation; and energy resources. (See Table 17.1.)

**Table 17.1: Best-standing corporations according to the MECRI 2004**

| Ranking | Corporation | MECRI 2004 |
|---|---|---|
| 1 | Grupo Industrial Bimbo | 0.90 |
| 2 | Instituto Tecnológico y de Estudios Superiores de Monterrey | 0.88 |
| 3 | PEMEX | 0.86 |
| 4 | Nestlé | 0.85 |
| 5 | Universidad Iberoamericana | 0.84 |
| 6 | Grupo Modelo | 0.83 |
| 6 | Instituto Tecnológico Autónomo de México | 0.83 |
| 6 | Universidad de las Américas, Puebla | 0.83 |
| 9 | Vitro | 0.81 |
| 9 | Coca-Cola FEMSA | 0.81 |
| 9 | Cervecería Cuauhtémoc Moctezuma | 0.81 |

Transparencia Mexicana decided to provide a positive incentive to corporations to improve by publicly acknowledging the good standing of the 10 firms with the strongest reputation, rather than publishing the names of the worst performers or measuring perceived corruption levels. Companies with the best reputation in each of the 12 sectors under examination and those with the highest index for each of the eight variables measured were also publicly acknowledged. Information about all of the 108 corporations is open to the governing bodies and high-level executives of each corporation concerned in order to help them identify areas for improvement. The information is not available to the general public, since the idea behind the exercise is to provide positive incentives for companies to improve by striving to be included on the list of top-performing companies.

For more information see: www.transparenciamexicana.org.mx

## Note

1. The MECRI 2004 survey interviews were conducted between 15 November and 7 December 2003.

# 18 Officials' asset declaration laws: do they prevent corruption?

*Ranjana Mukherjee and Omer Gokcekus*[1]

Requiring public officials to declare their wealth and assets is widely considered an effective measure to prevent corruption. It has been included as an article of agreement in the United Nations, the African Union, and the Inter-American conventions against corruption. But how effectively can officials' asset declaration laws reduce corruption? Are there any features in the laws' design and implementation that act as stronger antidotes to corruption than others?

To address these questions, we examined various countries' asset declaration laws to find common aspects within such laws. Using a method similar to that of Transparency International's National Integrity Systems Survey, we then constructed a list of seven different aspects of such laws: (1) the date of implementation and whether there is a constitutional mandate; (2) the coverage, or who must file a declaration (for example, only the highest level officials, or both high- and low-level officials); (3) the filing frequency; (4) the specificity of the declaration's content (for example, must the declaration include the value of the assets, assets held outside the country?); (5) the details of the declaration's processing (for example, is there a separate body which receives and verifies the declaration's contents; does the law describe the verification process?); (6) the punishment for breach; and (7) whether or not there is public access to declarations. Next, we collected the laws from 16 different countries and systematically analysed the laws according to the seven common aspects listed above.

This project was initiated both to evaluate current laws designed to reduce corruption, and as a tool for governments designing or improving their own laws. In order to facilitate this process, the World Bank has created a website which contains a database of the laws used in this study and tools for comparing the different aspects of these countries' laws.[2] To highlight the most significant aspects of these laws and their effectiveness in reducing corruption, we performed a series of statistical tests to measure the association between the possession of these countries' laws and their perceived level of corruption. These results are presented below. In all cases, Transparency International's 2004 Corruption Perceptions Index (CPI) was used as the measure of corruption inside each country. To perform the statistical tests, we divided the countries into quartiles based on their CPI scores. Accordingly, countries with the highest scores are in the *least corrupt* quartile and countries with the lowest scores are in the *most corrupt* quartile.

## Findings

1. *Is there an association between the inclusion of asset declaration laws within the constitution and reduced corruption?* No. In six of the examined countries, officials' asset declarations followed from constitutional directives. But these countries had lower average CPI scores, implying higher perceived corruption, than countries that did not have asset declaration within their constitutions (2.69 versus 3.39). Additionally, four of those six countries' laws did not require full transparency concerning officials' wealth, as they did not include directions on how the public could access officials' asset statements. Thus, although a constitutional provision is intended to signal the high value placed by a nation on its officials' integrity, our analysis finds that this intention does not necessarily translate into reduced corruption.

2. *Is there an association between the level of corruption and the amount of time that the law has been in effect?* Yes. Countries with a longer tradition of officials' asset declaration laws had significantly lower corruption than countries with newer laws. Among the countries examined, the quartile with the oldest laws (where the average age of the law was 17 years) had average CPI scores of 5.2, which was nearly three times higher than the average CPI (1.8) of the quartile of countries with newest laws (where the age was 1.7 years). (See Figure 18.1.)

3. *Is there an association between the level of corruption and which level of officials must declare their assets?* No. In 7 of the 16 countries examined, asset disclosure was required of all public officials. The average CPI scores for this group of countries was not significantly

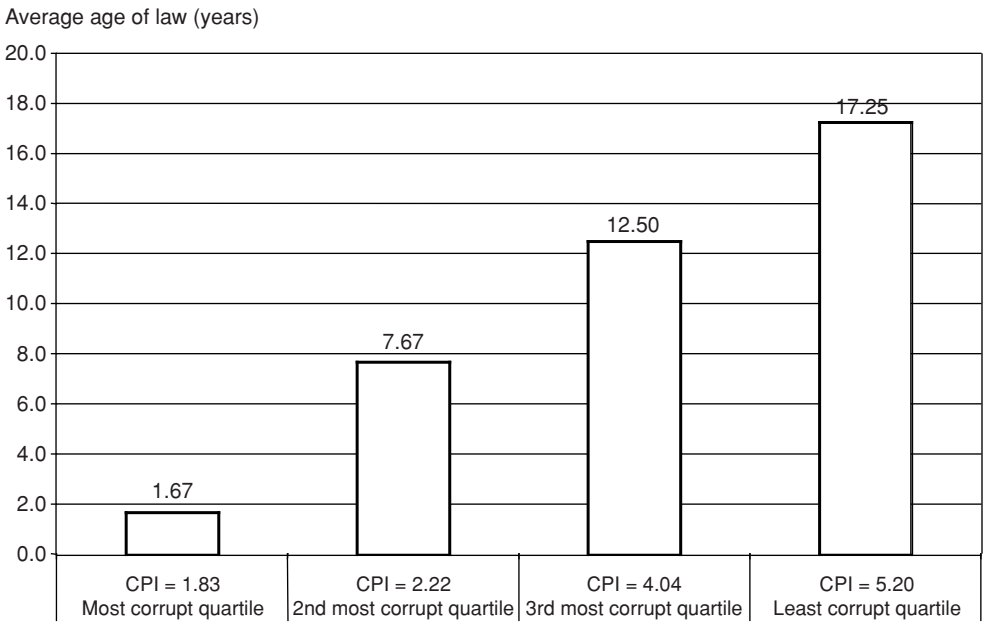


Figure 18.1: It takes time for officials' wealth declaration law to demonstrate results

lower than countries that had adopted a more top-down approach. In the latter group of countries, the list of officials that are required to submit asset statements started at the very top of the executive pyramid, and extended downwards to the senior or middle level. This could imply that corruption reduction at top executive levels has a powerful demonstrative effect on other officials and that transparent behaviour at the top can deter administrative corruption. Additionally or alternatively, it could imply that petty administrative corruption affects CPI ratings less than grand corruption. Thus our findings suggest that instead of simply requiring all officials to submit declarations, a pragmatic recognition of internal enforcement capacity and the selection of who should declare wealth could be more useful.

4. *Is there an association between the level of corruption and the threat of prosecution for those who do not follow the laws?* Yes. Perceived corruption was lower in countries whose declaration laws also permitted the government or anti-corruption body to prosecute the offending official. In the least corrupt quartile, all countries' asset declaration laws also provided for prosecution for offenders. In the second lowest quartile, three-quarters of the countries' laws had prosecution provisions. Only half the countries in the bottom two quartiles had prosecution provisions in their asset declaration laws.

5. *Is there an association between lower corruption levels and verification mechanisms within the various laws?* Yes. In this respect, two practices were observed. In some countries, every official's submission was verified by the recipient body; in others, the declaration was stored untouched, to be retrieved only if corruption allegations were received against the official. Countries that verified officials' statements have significantly lower corruption than countries that do not verify declaration content. The average CPI of the verifiers (3.72) was higher than that of the do-nothings (2.48).

6. *Is there an association between lower corruption and public access to asset disclosure laws?* Yes. Some countries' laws required that asset disclosures be placed in the public domain, either through website posting, or by informing where and when these documents were available for public inspection. In others, only a designated organisation of government could view the officials' declarations. Countries that gave public access to officials' asset declaration had significantly lower corruption (average CPI = 3.61) than the other group that restricted public access (average CPI = 2.46).

Our analysis further demonstrated that the combination of content verification and public access to the declarations demonstrated an even greater association of reduced corruption. Where full verification and public access to declarations is allowed, the average CPI score (4.13) is double that of countries that neither verify statements' contents nor allow public access to them (2.07). Countries that either verify or allow public access have perceived corruption levels in between these two extremes (with average CPI scores of 3.4 and 2.5 respectively). (See Figure 18.2.)

## Conclusion

These preliminary results were supported by regression analyses with the variables described above, along with other country characteristics. Since the conclusion of these preliminary analyses, we have expanded our dataset to include 42 countries. Our

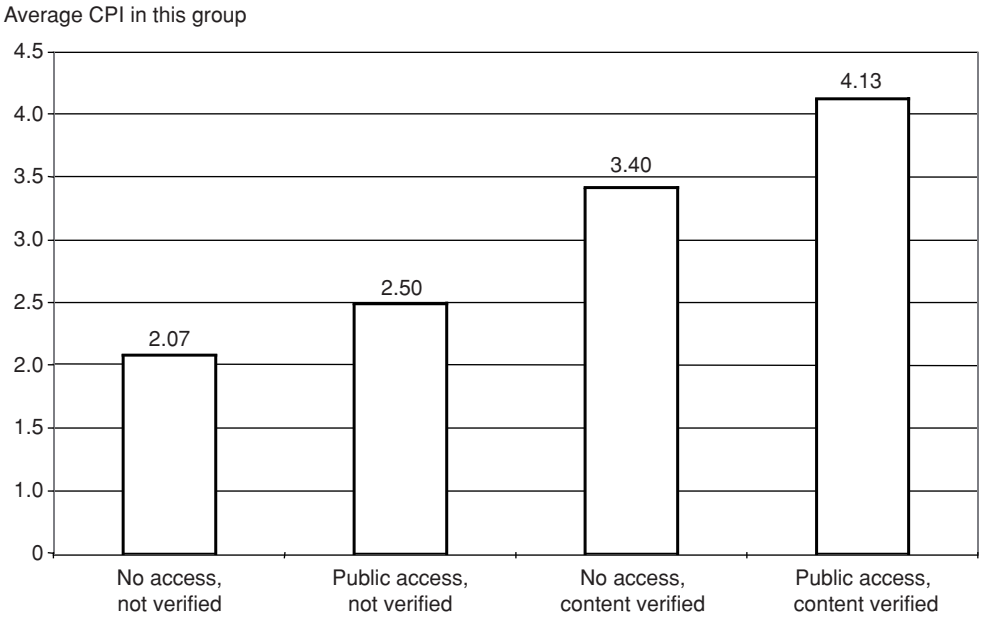


Figure 18.2: Effectiveness of content verification and public access in officials' asset declaration laws

initial analysis of this expanded dataset corroborates our findings from the original dataset. In addition, we are currently examining the different aspects of conflict of interest laws and their ability to reduce corruption. The expanded database for asset declaration laws and a new database for conflict of interest laws will be available at the above-mentioned World Bank website.

## Notes

1. Ranjana Mukherjee is senior public sector specialist in the South Asia Region of Poverty Reduction and Economic Management Network at the World Bank (contact: rmukherjee@worldbank.org). Omer Gokcekus is an associate professor at the John C. Whitehead School of Diplomacy and International Relations, Seton Hall University, United States (contact: gokcekom@shu.edu).
2. See http://www1.worldbank.org/publicsector/civilservice/assets.htm