

Governance Matters IV: New Data, New Challenges

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In a new study we present a set of governance indicators covering 209 countries over the period 1996-2004. In this note we summarize the research, suggesting the key features and results that emerged from the updated governance indicators and highlighting the relevant policy issues.

New Governance Indicators: Updated data, broad coverage, and higher precision

The indicators capture **six key dimensions of institutional quality or governance:**

1. *Voice and Accountability* – measuring political, civil and human rights
2. *Political Instability and Violence* – measuring the likelihood of violent threats to, or changes in, government, including terrorism
3. *Government Effectiveness* – measuring the competence of the bureaucracy and the quality of public service delivery
4. *Regulatory Burden* – measuring the incidence of market-unfriendly policies
5. *Rule of Law* – measuring the quality of contract enforcement, the police, and the courts, as well as the likelihood of crime and violence
6. *Control of Corruption* – measuring the exercise of public power for private gain, including both petty and grand corruption and state capture

For 2004, these indicators are based on 352 different underlying variables measuring perceptions of a wide range of governance issues. The variables are drawn from 32 separate data sources constructed by 30 different organizations worldwide. We present estimates of the six dimensions of governance for each country, as well as margins of error capturing the range of likely values for each country and period. These margins of error are not unique to perceptions-based measures of governance, but are an important feature of any measure of governance, 'objective' or 'subjective'.

We have aggregated hundreds of individual variables into aggregate indicators which in fact reduces the margins of error of our governance indicators as compared with any individual measure. The precision of the aggregate governance indicators in this updated analysis has also 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. One advantage of our aggregation methodology is not only that it aims at reducing margins of error, but that it also provides

¹ This note summarizes our research paper "Governance Matters IV: Updated Governance Indicators 1996-2004, available at www.worldbank.org/wbi/governance/pubs/govmatters4.html. The authors can be contacted at 1818 H Street N.W., Washington, DC, 20433, dkaufmann@worldbank.org, akraay@worldbank.org, 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. The data, as well as a web-based graphical interface, are available at: www.worldbank.org/wbi/governance/govdata/.

an explicit measure of such degree of precision, thereby enabling us to suggest when a difference observed between countries, or over time, is statistically significant and when it is not.

As an illustration of the usefulness of these margins of error in making cross-country comparisons of governance, consider the Control of Corruption indicator. The US government's Millennium Challenge Account aid program requires recipient countries to score above the median of a group of 70 potentially-eligible countries on this indicator. We can use our estimates of governance and their margins of error to assess the likelihood that corruption in a country actually falls above the median or not. Using our 2004 data, we can identify a group of 17 poorly-performing countries, or about one-quarter of the sample, where there is less than a 10 percent chance that corruption in these countries actually falls above the median. For another 23 countries, or about a third of the sample, we are quite confident that corruption in these countries falls above the median, with a probability of at least 90 percent. In contrast, for the remaining 30 countries, the probability that they fall above the median is somewhere between 10 percent and 90 percent, and so we have less confidence that these countries are correctly classified. If we relax our standards of significance to 25 percent and 75 percent, we find that only about 20 countries out of 70, or 29 percent of countries fall in this zone of uncertainty.² This example shows that we can use this kind of data to identify with considerable confidence groups of strong and weak performers. But at the same time the presence of margins of error reminds us that finer distinctions among countries near the middle of the pack are much more difficult to make given the inherent difficulties of measuring governance with any type of data.

Is this kind of subjective, perceptions-based data useful?

As in our past work, we continue to rely on perceptions-based or subjective measures of governance to develop our composite indicators. We show that this kind of data contains important information often not captured by objective indicators, particularly in emerging economies. For example, we show in the paper that the firm's perceptions of the difficulty of starting a new business, or of their tax burdens, do not depend solely on the relevant legal framework governing business entry and taxation. Rather, firms' views on these issues are also importantly influenced by the degree of corruption in their country (particularly so in developing countries), suggesting that not only do formal rules matter, but also the institutional environment in which these rules are applied and enforced (Figure 1).

Is there an Economic Development Dividend from better Governance, or are governance improvements mostly the byproduct of higher incomes?

There is by now a strong consensus among both academics and policymakers that good governance provides the fundamental basis for economic development. Academic research has focused on the effects of institutional quality on growth in the

² We first performed these MCA-related calculations in late 2002, shortly after the announcement of the initial MCA eligibility criteria. At that time, using the older version of our 2000 Control of Corruption indicator, we found that 23 out of 61 countries (or 38 percent of countries) fell in this intermediate zone. This much higher proportion of intermediate countries reflected the fact that the old version of our 2000 Control of Corruption indicator relied on substantially fewer data sources than we now have available to us for both 2000 and 2004.

very long run, noting that there is a strong causal impact of institutional quality on per capita incomes worldwide. Figure 2 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 three-fold.³

Such an improvement in governance by one standard deviation is feasible and realistic, since it is only a fraction of the difference between the worst and best performers, and would correspond for instance, to an improvement in the current ratings of Voice and Accountability between the level of Myanmar to that of Kazakhstan, or from the level of Kazakhstan to that of Georgia, or from the level of Georgia to that of Botswana. For improvements in Rule of Law, a one standard deviation difference would for instance constitute the improvement from the levels of Somalia to those of Laos, or from Laos to Lebanon, or from that of Lebanon to Italy, or from Italy to Canada, while for Control of Corruption it is the improvement from the levels of Equatorial Guinea to those of Cuba, Honduras or Uganda, or from those of Uganda to those of Lithuania or Mauritius, or from those of Mauritius to those of Portugal, or from those of Portugal to the stellar standards of Finland, Iceland or New Zealand.

Even over much shorter periods such as the past 10 years, countries with better institutional quality have grown faster. 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 policymakers’ attention.

Should weak governance performance in poor countries be discounted because of low income levels? The challenges for Africa

In recent years the international community has rightly turned its attention to the problems of underdevelopment in Africa. Not only is Africa poorer than other regions in the developing world, it also lags starkly behind other regions in reaching the Millennium Development Goals. If past trends continue, many countries in Africa will need to double their per capita incomes over the next decade in order to attain the goal of halving poverty by 2005. There is widespread consensus that a combination of substantial aid inflows, together with concerted domestic policy reform, is necessary to meet this challenge.

In light of the strong positive effect of governance on development, and in light of its importance for effective aid delivery, it is then a matter of considerable concern that governance performance in Sub-Saharan Africa is on average quite weak (Figure 2). Countries in Africa are poor, and too often they are also poorly governed. Fully 38 out of 46 countries in the region are in the bottom-left quadrant of the graph, meaning that they are both 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, as described above, recent research provides very little evidence in support of the proposition that poor governance in Africa is attributable to Africa’s poverty. Rather,

³ The estimates come from Alcalá and Ciccone (2004), Acemoglu, Johnson and Robinson (2001), Kaufmann and Kraay (2002), and Rodrik, Subramanian and Trebbi (2004). References available in main paper, downloadable at: www.worldbank.org/wbi/governance/pubs/govmatters4.html.

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. The International Development Association (the highly concessional loan window of the World Bank), as well as the U.S. government's Millennium Challenge Account both explicitly tie aid transfers to governance outcomes, relying on a variety of different indicators.⁴

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. As we have emphasized in our work, the presence of measurement error in all types of governance indicators, including our own, makes assessing trends in governance a challenging undertaking.

In this paper we develop a formal statistical methodology, as well as some simple rules of thumb, for identifying changes in governance that are likely to be statistically and practically significant. Over the eight-year period spanned by our governance indicators, we find that in about 10 percent of countries we can be highly confident (at the 90 percent significance level) that governance has changed substantially, while at a lower 75 percent significance level, roughly 20 percent of all observed changes stand out as significant. 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; or the deterioration in Rule of Law during that period in Ethiopia, Namibia, West Bank/Gaza and Argentina, or the improvements in Government Effectiveness in South Africa and Bulgaria.

⁴ IDA relies heavily on the World Bank's Country Policy and Institutional Assessment, one of the ingredients in our aggregate governance indicators. The governance component of the MCA eligibility criteria relies heavily on our aggregate indicators.

In general it is of concern that there is little evidence of systematic improvements in regional averages for governance in most regions including Africa. Table 1 summarizes the evidence based on our new governance indicators for trends in three dimensions of governance 1996-2004 in Africa. In all cases, we find that roughly as many countries in Africa show declines in governance as show improvements. And 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.

We also address the question of whether governance has been improving worldwide on average. This is important because our aggregate indicators measure only countries' relative performance in each year. Thus, it may be the case that the lack of a measured relative improvement in governance in a country or region may simply reflect the fact that the world in general could actually be improving in absolute terms. To address this issue we analyzed the individual sources that are inputs to our aggregate indicators, and found that in fact there is no evidence of governance improving since 1996 (or any period thereafter). In fact, it is quite sobering to see from the review of these indicators that on average the quality of governance worldwide has remain stagnant, even though –as noted above– a number of countries have improved significantly, yet there are also countries exhibiting significant deterioration, and many where little change has taken place. Consequently, there is no significant difference in assessing relative or absolute changes in levels of governance since the mid-nineties.

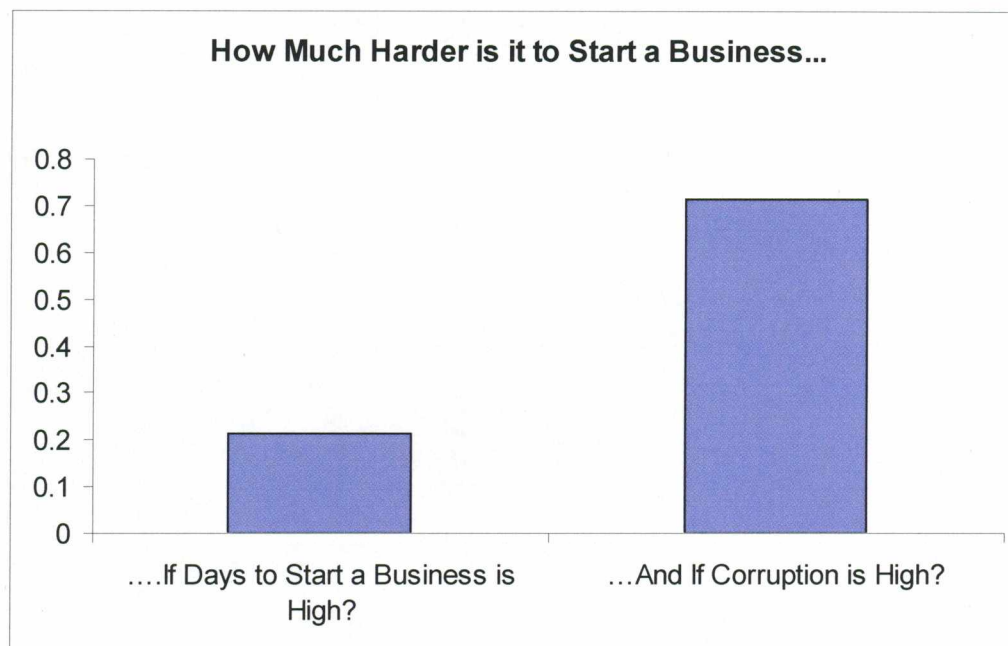
Salient Implications

First, there are implications for efforts to measure governance. 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 any data gathering, and construction and interpretation of indicators on governance and investment climate, must take margins of error into account and acknowledge, as we do, that differences in governance between countries, and over time, cannot be measured with absolute precision. The advantage of aggregate indicators is that they are more precise than any individual indicator – but even so margins of error are not negligible. And a further advantage of our aggregate indicators is that they come with explicit margins of error, unlike most other efforts to measure governance where these are left implicit. This is particularly relevant when classifying countries by their governance ratings for policy purposes.

Second, it is important to keep our aggregate governance indicators in perspective. Although over the past 8 years they have been useful in providing a general snapshot of the countries of the world on various broad components of governance, they are still rather blunt instruments for policy advice at the country level, as are any other multi-country comparative indicators of governance and investment climate. Thus, they need to be 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-data sets, however, do point to the importance of moving concretely to the next stage of governance reforms.

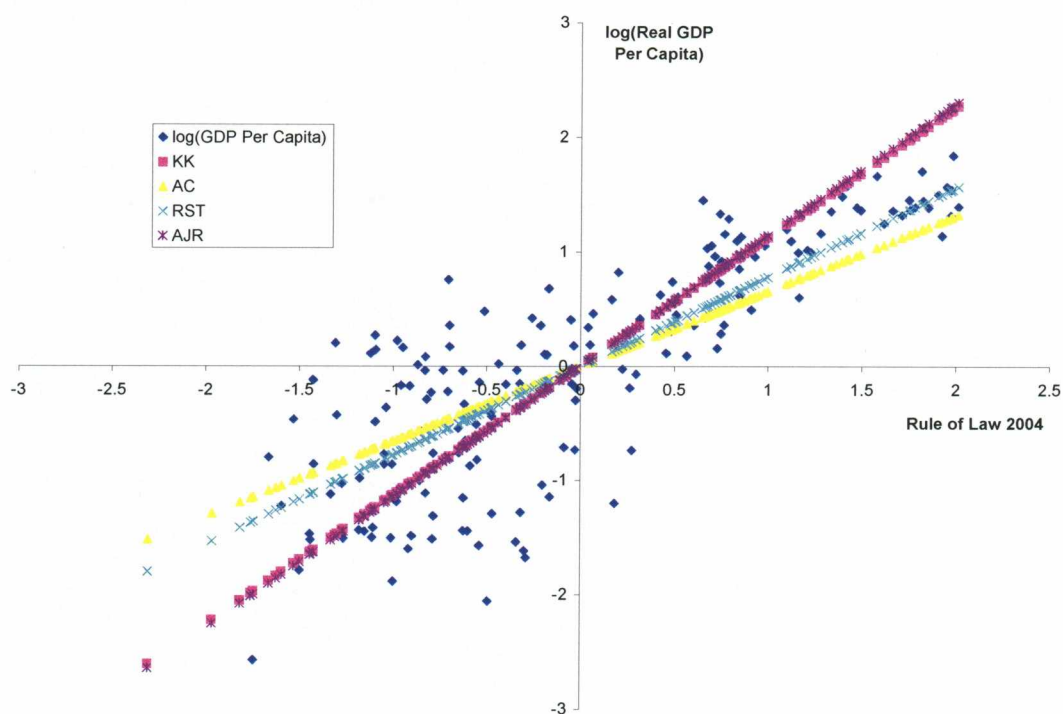
Finally, given the lack of worldwide progress on governance, coupled with its importance for development, a case can be made for redoubling our analysis of this connection, as well as for questioning the effectiveness of some traditional approaches to improving governance. In particular, the importance 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. By contrast, the efforts made in fighting corruption by, for instance, instituting additional anticorruption commissions, adopting more laws and decrees, and initiating more campaigns, may not have had the desired payoffs and are worth reconsidering.

Figure 1: Rules Matter, But So Do Perceptions of Corruption



Source: Kaufmann, Kraay and Mastruzzi (2005). The vertical axis measures the estimated impact on firms' responses to a survey question regarding the difficulty of starting a business (the 2004 Global Competitiveness Survey) from moving from the 50th percentile to the 75th percentile of a de jure measure capturing the number of days required to start a business (first bar) and from also having overall corruption levels move from the 50th to the 75th percentile (second bar).

Figure 2: The Development Dividend of Good Governance



Note: The per capita GDP data has been standardized to have mean zero and standard deviation one. The four fitted lines correspond to four different sets of estimates of the causal impact of governance on incomes in the long run: AJR – Acemoglu, Johnson and Robinson (2000), KK – Kaufmann and Kraay (2002), AC – Alcala and Ciccone (2004), RR – Rodrik and Rigobon (2004). All scenarios were based on our 2004 KK estimates of Rule of Law.

Table 1: Changes in Governance in Africa, 1996-2004

	<u>Number of Countries</u>	<u>Country Names</u>
Voice and Accountability		
Significantly Improved	5	Ghana, Gambia, Nigeria, Sierra Leone, Tanzania
Improved	16	
Worsened	22	
Significantly Worsened	4	Central African Republic, Cote d'Ivoire, Eritrea, Zimbabwe
Government Effectiveness		
Significantly Improved	4	Botswana, South Africa, Tanzania, Congo D.R.
Improved	16	
Worsened	21	
Significantly Worsened	6	Central African Republic, Cote d'Ivoire, Comoros, Sierra Leone, Chad, Zimbabwe
Control of Corruption		
Significantly Improved	3	Gabon, Tanzania, Congo D.R.
Improved	13	
Worsened	12	
Significantly Worsened	5	Cote d'Ivoire, Guinea, Gambia, Namibia, Zimbabwe

Source: Kaufmann, Kraay and Mastruzzi (2005) – <http://www.worldbank.org/wbi/governance/govdata/>