

Indicators of Governance and Institutional Quality

New Data on Governance

- [TI's 2005 Corruption Perceptions Index](#)
- [WBI Worldwide Governance Indicators](#)
- [World Bank Investment Climate Survey Database](#)
- ["Doing Business": Regulations and Their Enforcement](#)
- [International Budget Project](#)
- [Public Integrity Index](#)
- [Freedom House: Civil Liberties and Political Freedoms](#)
- [Reporters Without Borders: Worldwide Press Freedoms Index](#)

New global standards of governance are emerging. Citizens of developing countries are demanding better performance on the part of their governments, and they are increasingly aware of the costs of poor management and corruption. Attitudes are also changing in industrial countries where bribery is no longer viewed as a legitimate cost of doing business overseas. At the World Bank and other international agencies, scarce resources must be allocated to governments that will use them most effectively, and countries are asking for help in diagnosing governance failures and in finding solutions. These developments have led to new interest in measuring the performance of governments, using indicators of governance and institutional quality. This section provides access to many of the existing indicators [by indicator source](#) for all countries. It also provides a brief "[User's Guide](#)" describing the ways in which indicators differ from each other, with an emphasis on selecting the indicators that are most appropriate for one's particular purposes.

Most of the indicators discussed below were not developed by the World Bank, and the World Bank does not take an official position on their accuracy.

A User's Guide to Governance Indicators

- [Dimensions of Governance Indicators](#)
- [Performance indicators used in development research](#)
- [Process indicators](#)
- [References and suggested readings](#)

Dimensions of Governance Indicators There are two broad types of institutional measures available for large samples of countries: evaluative measures and descriptive measures. **Performance** measures provide assessments of the quality of governance. For example, governments are rated with respect to corruption levels, or predictability of policymaking. **Process** measures describe the institutional "inputs" that produce governance outcomes. Unlike performance measures, process measures have no normative content. One example of a process measure is the average pay of civil servants (relative to the private sector or to per capita income); whether or not the election of national legislators is governed by proportional representation (PR) is a second example. Governance indicators differ along many other dimensions, including:

- [Aspects of governance assessed](#)
- [Specificity](#)

- **Demonstrated Links to Poverty/Development Outcomes**
- Data coverage
 - **across countries**
 - **over time**
- **Method of data generation**
- **Transparency and replicability**
- **Ownership**
- **Data quality and accuracy**
 - **aggregations**
 - **number of expert/investor opinions solicited**
 - **correspondence with related measures**
 - **financial incentives for accuracy**
 - **use of data in published studies**

Indicators measure different *aspects of the quality of governance*, for example the severity of corruption, the extent of civil liberties, bureaucratic efficiency, the rule of law, and the predictability of policymaking. Measures differ in terms of *specificity* regarding the aspect(s) of governance being assessed. For example, an indicator of "corruption" is less specific than an indicator of "corruption in the bureaucracy." Aggregating multiple indicators (as in Transparency International's Corruption Perceptions Index), whatever its virtues on other grounds, tends to reduce specificity. Indicators differ in terms of their *demonstrated links to development outcomes*. Most empirical evidence linking governance to development outcomes is based on very *non-specific* indicators. These studies have been invaluable in focusing attention on the importance of governance, but tell us very little about specific governance reforms that will reliably improve poverty and development outcomes. Measures differ with respect to *data coverage across countries*. Data on some indicators are available for most or all countries, while others are provided only for countries in certain regions, or only for countries in which foreign investors have greater interest. Caution must be used in making inferences from indicators available for smaller, less-representative samples of countries. For example, only about 50 countries are included in the Business Environmental Risk Intelligence (BERI) ratings. Because these 50 are selected on the basis of interest by foreign investors, the lowest-rated countries in fact may be reasonably well-governed. Indicators differ in their *data coverage over time*. It may be important for some purposes to track changes in the quality of governance, or changes in political institutions, over time. Some indicators date to the early 1970s, but others are very new or are not updated and consequently do not permit comparisons over substantial periods of time. Measures differ in the *method of data collection*. For example, some performance indicators are based on objective data. Others are based on subjective evaluations of a small number of experts, while yet others are based on surveys of investors, experts, or the general public. Some indicators, such as Transparency International's Corruption Perceptions Index, are constructed by aggregating multiple indicators from various sources. Associated with differences in the method of data collection are differences in the *transparency* and *replicability* of measures. In general the processes and information used to construct indicators are the least transparent in the case of evaluations produced by a small number of experts. Transparency can also be reduced by aggregation. The method of data generation may also have implications for *ownership* or political acceptability of indicators. Assessments of experts based in developed-nation firms or foundations tend to encounter more opposition from developing-nation governments. Non-transparent processes of data generation

make it more difficult to defend the validity of the data in the face of such opposition. Indicators are likely to differ substantially with respect to **quality and accuracy**. It is impossible to determine which are more accurate than others, but there are several guiding principles:

Aggregating several indicators that purport to measure similar aspects of governance is likely to improve accuracy, on the principle that more information is usually preferable to less. To the extent that the various indicators being aggregated are *not* similar to each other in the aspects of governance they purport to evaluate, specificity is lost. Accuracy in measuring (say) legislative corruption may improve or worsen – there is no way of knowing -- by aggregating measures of legislative, bureaucratic, and judicial corruption. Again applying the principle that more information is better than less, expert evaluations are likely to be more accurate, other things equal, when based on a larger **number of experts**

. Similarly, the accuracy of indicators based on investor surveys is likely to improve with the number of respondents. Among several indicators that purport to measure similar aspects of governance, an indicator that is only weakly **correlated** with the others is likely less accurate than one that is strongly correlated with the others. However, the possibility cannot be ruled out that the most idiosyncratic indicator is the most accurate. Some but not all indicators face a market test; dependence on paying subscribers provides some **incentive for accuracy**. Of course, the identity of the subscribers has implications for the aspects of governance that are being assessed: ratings marketed to foreign investors provide assessments of risks to those investors, not to domestic investors (although the risks are likely to be correlated). Evaluations produced by experts at non-profit foundations may be influenced by the interests or ideology of the foundation’s donors. Some indicators have been widely available for long periods of time, or used in many published **research papers**, offering opportunities for challenges to the data and for improvements, providing additional credibility to the indicator.

Selected Performance Indicators

Sources	Aspects of Governance Assessed (partial list only for some sources)	Specificity	Method of Data Collection	Coverage across countries	Coverage over time	Reliance on Subscribers (y/n)	Use in Published Studies
WDR97 (Private sector survey)	Policy unpredictability, Quality of government services, Corruption and red tape, and Judicial unpredictability	Med	Business Survey	Med	Low	No	Low
CPIA (World Bank)	Property Rights and Rule-Based Governance Quality of Budgetary & Financial Management Efficiency of Revenue Mobilization Efficiency of Public	Med	Experts (many)	High	Low	No	None

	Expenditures Transparency, Accountability and Corruption						
KKZ (Kaufmann, Kraay and Zoido-Lobaton)	Graft Rule of Law Voice and Accountability Political Instability and violence Government Effectiveness Regulatory Burden	Low	Aggregation	High	Low	No	Low
TI (Transparency International)	Corruption Perceptions Index	Low	Aggregation	Med	Low	No	Med
Freedom House	Political Freedoms Civil Liberties	Low	Experts (few)	High	High	No	High
International Country Risk Guide (ICRG)	Corruption in Government Law and Order Tradition Bureaucratic Quality	Low	Experts (few)	High	High	Yes	High
BERI (Business Environmental Risk Intelligence)	Bureaucratic Delays Contract Enforceability Nationalization Risk Policy Stability	Low	Experts (many)	Low	High	Yes	Med
Heritage	Property Rights Black Market Regulation	Low	Experts (few)	High	Low	No	Low
GCR (Global Competitiveness Report	Civil service independence from politics Competence of public sector personnel Tax evasion Effectiveness of police force	Med	Business Survey	Low	Low	No	Low
WCY (World Competitiveness Yearbook)	Bribing and corruption Tax evasion Public service exposed to political interference Personal security and private property	Med	Business Survey	Low	Low	No	Low
CIM (Contract- intensive Money	Contract enforcement and property rights	Med	Objective	High	High	No	Low

Policy volatility Data [xls 162 K]	Policy credibility and fiscal management	High	Objective	Med	Med	No	None
Telephone delays	Quality of government service delivery	Med	Objective	High	Med	No	Low

Performance indicators in selected research papers

- [Freedom House](#)
- [ICRG](#)
- [BERI](#)
- [WDR97](#)
- [TI](#)
- [KKZ](#)
- [CIM](#)

Freedom House: The Freedom House indexes of political freedoms and civil liberties were used in cross-country research long before any of the other listed evaluative indicators. Bilson (1982) found that civil liberties were strongly associated with per capita income (and positively but not significantly related to recent income growth); he concluded that economic performance determines freedoms, rather than the other way around. Several subsequent studies concluded the opposite. Kormendi and Meguire (1985) used the civil liberties index as a proxy for "economic rights, such as freedom from expropriation or the enforceability of property rights and private contracts." They found that civil liberties were positively associated with investment rates, and – though increasing investment – growth rates in per capita incomes, for a sample of 47 countries for the 1950-77 period. Scully (1988) used the civil liberties and political freedoms indexes as measures of nations' "institutional framework." He tested the relationship between the Freedom House indexes and income growth over the 1960-80 period for a sample of 115 nations, controlling for changes in the capital-labor ratio. Income growth in nations with greater civil liberties or political freedoms was found to be about double the rate of growth in less-free nations. Grier and Tullock (1989) used the civil liberties index as "a proxy for the political infrastructure" of nations. They found that low scores on the index were associated with a significant reduction in income growth rates in the Latin America and Africa samples, but not in the Asia sample. A later set of studies investigating the relation of regime type to growth interpreted the Freedom House indexes as measures of democracy. Barro (1996) and Helliwell (1994) found that the indexes were positively related to growth only if variables such as educational attainment and investment rates are omitted as explanatory variables, and concluded that any beneficial impacts of democracy on growth may operate through these factor accumulation channels. Barro discovered that a curvilinear relationship between growth and the Gastil index fits the data better than a linear specification, with the fastest rates of growth exhibited by the partly-free nations. Barro, Helliwell and Burkhart and Lewis-Beck (1994) all concluded that the positive relation between income levels and democracy is mostly attributable to the former's impact on the latter rather than the other way around. These results are consistent with Lipset's (1959) earlier interpretation of the correlation between income and democracy. Isham, Kaufman and Pritchett (1997) found that rates of return on World Bank-financed projects in various developing countries over the 1974-93 period were higher in nations with greater civil liberties. The political freedoms index proved to be unrelated to project performance. The authors interpreted their

findings overall as evidence for the view that "increasing public voice and accountability" improves government performance. Knack (2000) investigated the impact of foreign aid on democratization, using the Freedom House indexes. Aid can potentially promote democratization through the effects of conditionality, through programs attempting to strengthen parties, electoral systems, and civil society, or less directly through increasing income and education, which Barro (1996) and others have linked to democratization. However, Knack found that aid levels are unrelated to democratization, in tests designed to correct for possible reverse causation from democracy to aid levels. Unlike most governance indicators, the Freedom House indexes are available over a long time period, facilitating the tracking of changes over time. From its inception in 1972 until 1989, all assessments for the Freedom House indexes were performed by Raymond Gastil. His departure created the possibility that comparisons of pre- and post-1989 ratings are not valid, as differences could be attributed merely to changes in the thinking of those undertaking the assessments. However, Knack (2000) found that year-to-year correlations in the indexes are very similar during the Gastil era, during the transition, and afterward, suggesting that the indexes are comparable over time, and that the 1972-89 ratings and the subsequent ratings can be treated as a single continuous series.

ICRG: Beginning with Knack and Keefer (1995), numerous studies have used the International Country Risk Guide (ICRG) indicators. This data set is produced by the PRS Group of Syracuse, NY for sale to subscribers, who are primarily overseas investors. The widespread use of ICRG is due largely to its broad coverage both across countries (130+) and over time (1982 to currently). Many studies (e.g. Hall and Jones, 1999) follow Knack and Keefer in using an index constructed from five ICRG variables that reflect the security of private property and the enforceability of contracts: "Corruption in Government," the "Rule of Law," "Expropriation Risk," "Repudiation of Contracts by Government," and "Quality of the Bureaucracy." Adding this index to a Barro-type growth regression, Knack and Keefer found that a standard-deviation increase in the index (about 12 points on a 50-point scale) increases growth by 1.2 percentage points on average. Chong and Calderon (2000) explore the possibility of reverse causality from growth rates to the ICRG (and BERI) ratings. Because the ratings are subjective assessments by experts, it is possible that the ratings are influenced by knowledge of recent economic performance; for example an "expert" who is asked to rate a country about which he/she knows very little might surmise that corruption must not be too severe in country X because it has been growing so rapidly and attracting so much investment. Calderon and Chong obtained strong evidence for two-way causality: growth increases the ICRG (and BERI) measures, but institutional quality as measured by ICRG (and BERI) values increases growth rates. Knack and Anderson (1999) show that higher values of the index are even more strongly associated with income growth for the poor than for the population overall. Hall and Jones (1999) link the index to per capita output levels and productivity rates. Knack (1999) found that aid dependence undermines the quality of governance, as measured by changes over time in an index of ICRG variables. Higher aid levels are associated with greater declines in the index; the strength of this effect increases when correcting for possible reverse causation from governance to aid levels. Technical assistance has a particularly damaging effect on the quality of governance.

BERI: Indicators from Business Environmental Risk Intelligence (BERI) have been available since the early 1970s, but for much smaller samples of countries (about

50) than ICRG. As with the ICRG data, BERI indicators are produced for sale to subscribers who are primarily investors interested in "political" risks associated with overseas investments. Developing countries included in BERI tend to be larger (e.g. China) or middle income (e.g. Argentina); few if any countries that are both small and poor are included, in contrast to the ICRG. The BERI indicators used by Knack and Keefer (1995) include "Contract Enforceability," "Nationalization Risk," "Bureaucratic Delays," and "Infrastructure Quality." An index of these BERI measures is strongly associated with higher investment and growth rates (Knack and Keefer (1995). Knack and Anderson (1999) show that higher values of the index are even more strongly associated with income growth for the poor than for the population overall. Chong and Calderon (2000) explore the possibility of reverse causality from growth rates to the BERI (and ICRG) ratings. Because the ratings are subjective assessments by experts, it is possible that the ratings are influenced by knowledge of recent economic performance; for example an "expert" who is asked to rate a country about which he/she knows very little might surmise that corruption must not be too severe in country X because it has been growing so rapidly and attracting so much investment. Calderon and Chong obtained strong evidence for two-way causality: growth increases the BERI (and ICRG) measures, but institutional quality as measured by BERI (and ICRG) values increases growth rates

WDR97: The World Bank sponsored a survey of private sector entrepreneurs and business managers as part of its 1997 World Development Report. The survey was conducted in 67 countries. Survey respondents include domestic and foreign investors, and both small and large firms are represented. A disadvantage of this survey approach is that only actual investors are surveyed, not all potential investors. Where investment rates are very low due to poor governance, perceptions among those who still choose to invest will be unrepresentative. This problem will lead to an underestimate of the true differences in perceptions of the quality of governance across countries.

TI: Transparency International annually updates its "Corruption Perceptions Index" by aggregating corruption ratings produced by experts (such as ICRG) and from surveys. The index was first published in 1995, for 41 countries with data aggregated from 7 surveys. The 1999 index covered 99 countries, with information from 14 sources.

KKZ: Kaufmann, Kraay and Zoido-Lobaton (1999a, 1999b) construct six aggregate indexes from numerous indicators collected from 14 different sources, including ICRG, BERI, Freedom House and others. The aggregate indexes are "rule of law," "graft," "voice and accountability," "government effectiveness," "political instability and violence," and "regulatory burden." Kaufmann et al. (199b) show that countries scoring higher on these indexes of rule of law, graft, voice and accountability, etc. tend to have lower infant mortality and higher literacy rates, as well as higher per capita incomes. They use exogenous instruments for their governance indexes to correct for possible reverse causality from income levels to governance.

CIM: Motivated in part by skepticism in some quarters regarding the value of subjective governance indicators, Clague et al. (1999) introduced an objective measure they refer to as "contract-intensive money," or CIM. This measure is equal to the proportion of M_2 that is not comprised of currency outside banks. Data

coverage for CIM is very comprehensive over time and across countries. Because CIM is objectively measured, it is not subject to contamination by knowledge of recent economic performance by country experts or by surveyed entrepreneurs, removing an important potential source of endogeneity. However, CIM is likely to be a "noisy" measure because decisions regarding whether to hold financial assets in the form of currency or deposits are likely to be sensitive to other factors as well as to the quality of governance. The logic behind CIM is that for numerous reasons individuals will hold a larger proportion of their financial assets in the form of currency in environments where third-party enforcement of contracts is unreliable. Money lent to financial institutions (i.e. bank deposits) is less safe where one cannot rely on contracts. Not only are banks more likely to default on their obligations, but governments unable or unwilling to enforce contracts between private parties are unlikely to respect private property themselves, e.g. by refraining from expropriating bank depositors. Clague et al. showed that CIM is significantly and positively correlated with growth rates and (even more strongly) with investment's share of GDP. These results are not sensitive to controlling for inflation (which makes holding currency less attractive) and for the most common measure of financial development, the ratio of M_2 to GDP.

Process Indicators

- **Civil Service Employment and Pay**
- **Weberian Comparative State Data Project**
- **Polity98 Project: Regime Characteristics, 1800-1998**
- **Database of Political Institutions (DPI)**
- **Political Constraint Index**

Civil Service Employment and Pay Schiavo-Campo et al. (1997a, 1997b) compiled cross-country data on civil service pay and employment. They describe various methodological problems that users of the data should bear in mind. For example, they note that the cross-country differences in monetary compensation that they measure may not adequately reflect differences in total compensation, given the lack of information on benefits in kind. Data are collected for 80 to 100 countries (depending on the particular indicator) for the early 1990s. Work is currently in progress to update these data. Pay variables in the data set include: average government wages as a ratio of manufacturing wages, average government wages as a ratio of per capita GDP, and the total government wage bill as a percentage of GDP. Public sector employment variables include: government administration (divided into central government and non-central government), education, health, and armed forces.

Weberian Comparative State Data Project This project, led by Peter Evans and James Rauch, collected data for 35 developing countries on various dimensions of "bureaucratic structure" and meritocracy. Qualitative responses to 20 questions were provided by 126 country experts (mostly from academia) over the 1993-96 period. Responses per country ranged from 2 to 5, and the responses were averaged to obtain country-level values. Most of the experts either worked in or were originally from the countries they rated. Indicators that Evans and Rauch construct from the data include (1) an index of meritocratic hiring, (2) an internal promotion and career stability index, (3) a civil service compensation index, and (4) an overarching "Weberian State Scale" constructed from responses to 10 questions. Rauch and Evans (2000) show that subjective ratings of bureaucratic

quality and corruption from ICRG and other sources are positively related to the meritocratic hiring index, but are unrelated to the indexes of compensation and internal promotion and career stability. Evans and Rauch (1999) found that the Weberian State Scale is strongly related to rates of economic growth.

Polity98 Project: Regime Characteristics, 1800-1998 This data set provides descriptive measures of political structures and regime change for the period 1800-1986. All large countries are included, but many with populations less than one million are not included. There are several variables addressing how chief executives are selected, and several others that describe the sources and extent of constraints on the chief executive's power. Other measures provide information on political participation, on centralization and scope of government authority, and on the institutionalization of autocracy and democracy.

Database of Political Institutions (DPI) The DPI contains 113 variables for 177 countries covering the period 1975-95. The variables provide information on elections, electoral rules, type of political system, party composition of the opposition and government and coalitions, and the extent of military influence on government. From the raw data, indexes of political stability and checks and balances are constructed. According to Beck et al. (2000), the database is designed for studying issues such as "the determinants of democratic consolidation, the political conditions for economic reform, the political and institutional roots of corruption, and the elements of appropriate and institutionally sensitive design of economic policy."

Political Constraint Index This index is coded annually for 140 countries beginning in 1960. The index incorporates information on the number of independent branches of government with veto power and the distribution of preferences across and within those branches. Henisz (2000) finds a significant relationship of the index to growth rates, using OLS, 3-stage least squares, and GMM estimation.

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