Millennium Challenge Corporation

Guide to the MCC Indicators and the Selection Process

Fiscal Year 2009



Contents

Part 1: Selection Process Overview	1
Identification of Candidate Countries	2
Publication of MCC's Selection Criteria & Methodology	2
Methodology	2
Indicators	3
Supplemental Information	4
Publication of MCC Scorecard	4
Selection of Compact-Eligible Countries	4
Selection of Threshold Countries:	4
Part 2: How to Read an Indicator Scorecard	5
Reading The Scores—A Reference Guide	6
Part 3: Guide to the MCC Indicators	7
Ruling Justly Category	8
Civil Liberties Indicator	8
Political Rights Indicator	10
Voice and Accountability Indicator	11
Government Effectiveness Indicator	14
Rule of Law Indicator	16
Control of Corruption Indicator	18
Investing in People Category	21
Health Expenditures Indicator	21
Primary Education Expenditures Indicator	22
Immunization Rates Indicator	23
Girls' Primary Education Completion Rate Indicator	24

Natural Resource Management Indicator	25
Encouraging Economic Freedom Category	26
Regulatory Quality Indicator	26
Inflation Indicator	28
Fiscal Policy Indicator	29
Business Start-Up Indicator	30
Land Rights and Access Indicator	32
Trade Policy Indicator	33
(Endnotes)	36

Part 1: Selection Process Overview



To select countries as eligible for Millennium Challenge Account Compact funding, MCC assesses the degree to which the political, social and economic conditions in a country promote broad-based sustainable economic growth. In making its determinations, MCC's Board of Directors considers three factors: performance on the policy criteria, the opportunity to reduce poverty and generate economic growth in the country, and the funds available to MCC. To assess policy performance, MCC uses third-party indicators to identify countries with policy environments that will allow Millennium Challenge Account funding to be effective in reducing poverty and promoting economic growth. MCC evaluates performance in three areas—Ruling Justly, Investing in People, and Encouraging Economic Freedom. The Selection Process has four major steps:

- 1. Identification of Candidate Countries
- 2. Publication of MCC's Selection Criteria and Methodology
- 3. Publication of MCC Scorecard
- 4. Selection of Compact-Eligible and Threshold-Eligible Countries

Identification of Candidate Countries

Candidate countries for the fiscal year are identified based on their per capita income. MCC submits a Report to Congress with a list of candidate countries prior to the selection of countries eligible for MCA assistance. For Fiscal Year 2009 (FY09), a "candidate country" must meet at least one of the following criteria and cannot be statutorily prohibited from receiving U.S. economic assistance:

- ★ Low Income Category: countries with a per capita income less than or equal to \$1,785; or
- ★ Lower Middle Income Category: countries with a per capita income greater than \$1,785 but less than or equal to \$3,705;

Publication of MCC's Selection Criteria & Methodology

MCC submits a Report to Congress describing the criteria and the methodology—including the indicators—which MCC's Board of Directors will use to select new countries as eligible for MCA assistance. MCC holds a 30-day formal public comment period following publication of the Report.

Methodology

The Board considers whether countries perform above the median in their income peer group (Low Income and Lower Middle Income) on at least half of the indicators in each of the three policy categories and above the median on the Control of Corruption indicator. A country may be determined ineligible if it performs substantially below

average on any indicator (i.e. the bottom 25th percentile) and has not taken appropriate measures to address the shortcoming.

Indicators

To evaluate policy performance, MCC uses, to the maximum extent possible, objective and quantifiable policy indicators in three broad policy categories: Ruling Justly, Investing in People, and Encouraging Economic Freedom. MCC favors policy indicators developed by independent third party institutions that rely on objective, publicly available data and an analytically rigorous methodology. MCC seeks indicators that have broad country coverage, cross-country comparability, and broad consistency in results from year to year. MCC also seeks indicators that are linked to economic growth, poverty reduction, and government policies. The 17 indicators that will be used in Fiscal Year 2009 are:

- **★** Ruling Justly
 - * Civil Liberties (Freedom House)
 - * Political Rights (Freedom House)
 - * Voice and Accountability (World Bank Institute)
 - * Government Effectiveness (World Bank Institute)
 - * Rule of Law (World Bank Institute)
 - * Control of Corruption (World Bank Institute)
- **★** Investing in People
 - * Immunization Rates (World Health Organization)
 - * Public Expenditure on Health (World Health Organization)
 - * Girls' Primary Education Completion Rate (UNESCO)
 - Public Expenditure on Primary Education (UNESCO and national sources)
 - * Natural Resource Management (CIESIN and YCELP)
- ★ Encouraging Economic Freedom
 - * Business Start-Up (IFC)
 - * Land Rights and Access (IFAD and IFC)
 - * Trade Policy (Heritage Foundation)

- * Regulatory Quality (World Bank Institute)
- * Inflation (IMF WEO)
- * Fiscal Policy (IMF country reports and national sources, cross-checked with IMF WEO)

Supplemental Information

The Board may also consider information to address gaps, time lags, measurement error, or other weaknesses in the indicators to assist in assessing whether MCC funds might reduce poverty and promote economic growth in a country. For FY 2009, this will include: the disabilities component of the U.S. Department of State's Human Rights Report, Transparency International's Corruption Perceptions Index, and the Global Integrity Index, among other sources.

Publication of MCC Scorecard

Following the public comment period on the selection criteria and methodology, MCC will publish country performance "scorecards" on its website (www.mcc.gov) for all candidate countries and countries that would be candidates but for legal prohibitions.

Selection of Compact-Eligible Countries

From the pool of candidate countries, the MCC Board selects new Compact-eligible countries according to the methodology described above and submits a report to Congress no later than 5 days after the determination. These countries are then eligible to begin developing Compact proposals for MCC's consideration.

Selection of Threshold Countries:

The MCC Board may also select countries to participate in the Threshold Program. The Threshold Program is for countries that demonstrate a significant commitment to meeting the eligibility criteria but fall short in only some policy areas. Threshold assistance helps countries address specific areas of policy weakness identified in MCC's selection indicators.

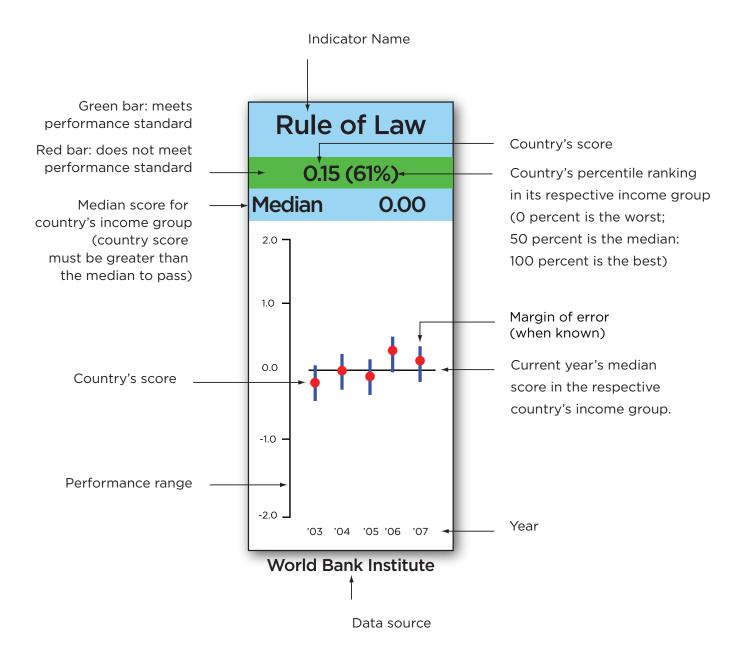
For more information on the MCA selection process, please refer to the Selection Criteria section of the MCC website (www.mcc.gov).

Part 2: How to Read an Indicator Scorecard



Reading The Scores—A Reference Guide

Each MCC candidate country receives a scorecard annually assessing performance in three policy categories: Ruling Justly; Investing in People; and Encouraging Economic Freedom.



Part 3: Guide to the MCC Indicators



MCC uses third-party indicators to identify countries with policy environments that will allow Millennium Challenge Account funding to be effective in reducing poverty and promoting economic growth. MCC evaluates performance in three areas—Ruling Justly, Investing in People, and Encouraging Economic Freedom—using 17 policy indicators. This is a guide to understanding and interpreting the third-party indicators used by MCC. It provides an overview of the policies measured by indicators, the relationship that these policies have to economic growth and poverty reduction, the methodologies used by the various indicator institutions to measure policy performance, descriptions of the underlying source(s) of data, and the contact information of the indicator institutions.

MCC favors indicators that:

- 1. are developed by an independent third party,
- 2. utilize an analytically-rigorous methodology and objective and high-quality data,
- 3. are publicly available,
- 4. have broad country-coverage and are comparable across countries,
- 5. have a clear theoretical or empirical link to economic growth and poverty reduction,
- 6. are policy-linked, i.e. measure factors that governments can influence within a two to three year horizon, and
- 7. have broad consistency in results from year to year.

For general questions about the application of these indicators, please contact the MCC's Development Policy Division at *DevelopmentPolicy@mcc.gov*.

Ruling Justly Category

The six indicators in this category measure just and democratic governance by assessing, *inter alia*, a country's demonstrated commitment to promote political pluralism, equality, and the rule of law; respect human and civil rights, including the rights of people with disabilities; protect private property rights; encourage transparency and accountability of government; and combat corruption.

Civil Liberties Indicator

This indicator measures country performance on freedom of expression and belief, association and organizational rights, rule of law and human rights, personal autonomy, individual and economic rights, and the independence of the judiciary.

Countries are rated on the following factors:

- ★ independence of the media and the judiciary;
- ★ freedom of cultural expression, religious institutions and expression, and academia;
- ★ freedom of assembly and demonstration, of political organization and professional organization and collective bargaining;
- ★ freedom from economic exploitation;
- ★ protection from police terror, unjustified imprisonment, exile, and torture;
- ★ the existence of rule of law, personal property rights, and equal treatment under the law;
- ★ freedom from indoctrination and excessive dependency on the state; and
- ★ equality of opportunity; gender equality;
- ★ freedom to choose where to travel, reside, and work;
- ★ freedom to select a marriage partner, and determine whether or how many children to have;
- ★ the existence of a legal framework to grant asylum or refugee status in accordance with international and regional conventions and system for refugee protection.

Relationship to Growth and Poverty Reduction

Studies show that an expansion of civil liberties can promote economic growth by reducing social conflict, removing legal impediments to participation in the economy, encouraging adherence to the rule of law, enhancing protection of property rights, increasing economic rates of return on government projects, and reducing the risk of project failure. Freedom of the press—another key civil liberty—is also associated with greater attentiveness to the social needs of the poor and with lower levels of corruption. Corruption, in turn, has a disproportionately large negative effect on the poor.

Source

Freedom House, <u>http://freedomhouse.org</u>. Questions regarding this indicator may be directed to <u>info@freedom-house.org</u> or 212-514-8040.

Methodology

Freedom House convenes a panel of independent experts to evaluate countries on a 60-point scale—with 60 representing "most free" and o representing "least free." The Civil Liberties indicator is based on a 15 question checklist grouped into four subcategories: Freedom of Expression and Belief (4 questions), Associational and Organizational Rights (3 questions), Rule of Law (4 questions), and Personal Autonomy and Individual Rights (4 questions).

Points are awarded to each question on a scale of o to 4, where o points represents the fewest liberties and 4 represents the most liberties. The highest number of points that can be awarded to the Civil Liberties checklist is 60 (or a total of up to 4 points for each of the 15 questions).

Political Rights Indicator

This indicator measures country performance on the quality of the electoral process, political pluralism and participation, government corruption and transparency, and fair political treatment of ethnic groups.

Countries are rated on the prevalence of free and fair elections; the ability of citizens to form political parties that may compete fairly in elections; freedom from domination by the military, foreign powers, totalitarian parties, religious hierarchies and economic oligarchies; and the political rights of minority groups. Countries are rated on the following factors:

- ★ free and fair executive and legislative elections; fair polling; honest tabulation of ballots;
- ★ fair electoral laws; equal campaigning opportunities;
- ★ the right to organize in different political parties and political groupings; the openness of the political system to the rise and fall of competing political parties and groupings;
- ★ the existence of a significant opposition vote; the existence of a de facto opposition power, and a realistic possibility for the opposition to increase its support or gain power through elections;
- ★ self-determination, self-government, autonomy, and the participation of minority groups through informal consensus in the decision-making process;
- ★ freedom from domination by the military, foreign powers, totalitarian parties, religious hierarchies, economic oligarchies, or any other powerful group in making personal political choices;
- ★ the openness, transparency, and accountability of the government to its constituents between elections; freedom from pervasive government corruption; government policies that reflect the will of the people;
- ★ the extent to which a government deliberately changes the country's ethnic composition to affect the political balance of power.

Relationship to Growth and Poverty Reduction

Although the relationship between democracy and economic growth is complex, research suggests that the institutional structures of democracy can promote growth by increasing policy stability, cultivating higher rates of human capital accumulation, reducing levels of income inequality and corruption, and encouraging higher rates of investment. The links between political rights and poverty reduction are similarly complicated, but there is evidence

that democratic institutions are better at reducing economic volatility and provide a more consistent approach to poverty reduction than do autocratic regimes.⁵ Research also links the incentive structure of democratic institutions with outcomes favorable for the poor.⁶ There has never been a famine in a modern democracy because failure to address food crises is politically costly for popularly elected leaders.⁷

Source

Freedom House, <u>http://freedomhouse.org</u>. Questions regarding this indicator may be directed to <u>info@freedom-house.org</u> or 212-514-8040.

Methodology

Freedom House convenes a panel of independent experts to evaluate countries on a 40-point scale—with 40 representing "most free" and o representing "least free." The Political Rights indicator is based on a 10 question checklist grouped into the three subcategories: Electoral Process (3 questions), Political Pluralism and Participation (4 questions), and Functioning of Government (3 questions). Points are awarded to each question on a scale of 0 to 4, where 0 points represents the fewest rights and 4 represents the most rights. The highest number of points that can be awarded to the Political Rights checklist is 40 (or a total of up to 4 points for each of the 10 questions). Two Additional Discretionary Questions are also considered:

- ★ Question A: For traditional monarchies that have no parties or electoral process, does the system provide for genuine, meaningful consultation with the people, encourage public discussion of policy choices, and allow the right to petition the ruler? For this question, an additional 1 to 4 points may be added.
- ★ Question B: Is the government or occupying power deliberately changing the ethnic composition of a country or territory so as to destroy a culture or tip the political balance in favor of another group? For this question, 1 to 4 points may be subtracted, depending on the severity of the situation.

Voice and Accountability Indicator

This index measures the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and media independence.

Countries are evaluated on the following factors:

- ★ the existence of free, fair, and regular elections; the independence and credibility of the electoral process, political competition and equal campaigning opportunities for all parties;
- ★ the existence of clear, established, and accepted constitutional mechanisms for the orderly transfer of power from one government to another;

- ★ the stability of democratic institutions;
- ★ the degree to which the executive, legislative, and judicial branches of government oversee the actions of one another and hold each other accountable for any excessive use of power;
- ★ responsiveness of the government to its constituents between elections;
- ★ freedom of speech, religion, assembly, association, and demonstration;
- ★ equality of opportunity; gender equality
- ★ freedom to choose where to travel, reside, and work;
- ★ freedom to select a marriage partner, and determine whether or how many children to have;
- ★ the existence of a legal framework to grant asylum or refugee status in accordance with international and regional conventions and system for refugee protection;
- ★ respect for minority groups; and protection of human rights;
- ★ the independence and quality of the media; the degree to which the government protects journalists from extra-legal intimidations, arbitrary arrest and detention, and physical violence, and conducts fair and expeditious investigation and prosecution when press freedom violations occur;
- ★ public confidence in the honesty of elections, public trust in Parliament, public satisfaction with democracy;
- ★ transparency of the business environment and government actions; the extent to which businesses are informed of developments in rules and policies and can express concerns;
- ★ the impact of legal political donations on public policy outcomes; the existence and enforcement of regulations to prevent undue influence of economically-privileged interests (e.g. campaign finance regulations);
- ★ the degree to which civic groups can testify, comment on, and influence pending government policy or regulation;
- ★ the degree to which NGOs are free from legal impediments from the state and from onerous registration requirements;
- ★ the degree to which funders of civic organizations and public policy institutes are free from state pressure;
- ★ the degree to which civil society activists are safe when working on corruption issues;
- ★ the degree to which citizens have access to public information (i.e. government records); government commitment to budget transparency;

- ★ the degree to which the government has put in place a policy and legal framework to enable the rural poor to organize into autonomous groups, associations, or other forms of collective action, and to enable the free formation and operation of rural organizations;
- ★ the existence of an institutional forum for dialogue between the government and rural organizations; the degree to which the rural poor are able to enter into dialogue with government representatives and express their concerns and priorities

Relationship to Growth and Poverty Reduction

Improving public participation and democratic accountability can foster an environment conducive to economic growth by reducing corruption, constraining opportunistic and discretionary behavior, improving the efficiency and responsiveness of public institutions, expanding investor protections, encouraging political stability and social trust, and building respect for the rule of law and property rights. Research also links the incentive structure of democratic institutions with outcomes favorable for the poor. A large body of evidence suggests that the incentives created by the democratic interaction of citizens and state prompt, on average, higher investments in health and education, and thus higher levels of human capital accumulation.

Source

World Bank Institute (WBI), http://www.govindicators.org. Questions regarding this indicator may be directed to governancewbi@worldbank.org, 202-473-4557.

Methodology

The indicator is an index combining up to 20 different polls and surveys, depending on availability, each of which receives a different weight, depending on its estimated precision and country coverage. WBI draws on data, as applicable, from the Organization for Economic Co-operation and Development's *African Economic Outlook*, the *Afrobarometer Survey*, Bertelsmann Foundation's *Bertelsmann Transformation Index*, Freedom House's *Freedom in the World, Freedom of the Press*, and Countries at the Crossroads reports, the Economist Intelligence Unit's *Country Risk Service*, World Economic Forum's *Global Competitiveness Report*, Global Integrity's *Global Integrity Index*, the Gallup *World Poll*, Cingranelli-Richards' *Human Rights Database*, the International Fund for Agricultural Development's *Rural Sector Performance Assessments*, the French Government's *Institutional Profiles Database*, the *Latinobarometro* Survey, International Research and Exchange Board's *Media Sustainability Index*, the International Budget Project's *Open Budget Index*, Political Risk Service's *International Country Risk Guide*, Reporters Without Borders' *Press Freedom Index*, Vanderbilt University *Americas Barometer* Survey, Institute for Management and Development's *World Competitiveness Yearbook*, Global Insight's *Business Conditions and Risk Indicators*.

Government Effectiveness Indicator

This indicator measures the quality of public services, the quality of the civil service and its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.

Countries are evaluated on the following factors:

- ★ competence of civil service; effective implementation of government decisions; public service vulnerability to political pressure;
- ★ ability to manage political alternations without drastic policy changes or interruptions in government services:
- ★ flexibility, learning, and innovation within the political leadership; ability to coordinate conflicting objectives into coherent policies;
- ★ the degree to which government involves civil society in the policy-making process;
- ★ the extent to which the political leadership sets and maintains strategic priorities and the government effectively implements reforms;
- ★ the efficiency of revenue generation and expenditure management;
- ★ the quality of the public transportation system, public health care provision, and public schools; the availability of online government services;
- ★ policy consistency; the extent to which government commitments are honored by new governments;
- ★ prevalence of red tape; degree to which bureaucratic delays hinder business activity;
- ★ the extent to which effective coordination mechanisms ensure a high degree of policy consistency across departmental boundaries, and administrative structures are organized along functional lines with very little duplication;
- ★ the extent to which the business processes of government agencies are regularly reviewed to ensure efficiency of decision making and implementation;
- ★ the extent to which hiring and promotion within the government is based on merit and performance, and ethical standards prevail;
- ★ the extent to which the government wage bill is sustainable and does not crowd out spending required for public services; pay and benefit levels do not deter talented people from entering the public sector; flexibility (that is not abused) exists to pay more attractive wages in hard-to-fill positions;

- ★ the extent to which government revenues are generated by low-distortion taxes; import tariffs are low and relatively uniform, export rebate or duty drawbacks are functional; the tax base is broad and free of arbitrary exemptions; tax administration is effective and rule-based; and tax administration and compliance costs are low;
- ★ existence of a taxpayer service and information program, and an efficient and effective appeals mechanism;
- ★ the extent to which policies and priorities are linked to the budget; multi-year expenditure projections are integrated into the budget formulation process, and reflect explicit costing of the implications of new policy initiatives; the budget is formulated through systematic consultations with spending ministries and the legislature, adhering to a fixed budget calendar; the budget classification system is comprehensive and consistent with international standards; and off-budget expenditures are kept to a minimum and handled transparently;
- ★ the extent to which the budget is implemented as planned, and actual expenditures deviate only slightly from planned levels; budget monitoring occurs throughout the year based on well functioning management information systems; reconciliation of banking and fiscal records is practiced comprehensively, properly, and in a timely way (daily or weekly); in-year fiscal reports are prepared at least quarterly, issued within 4 weeks of end of period, and provide accurate data on all budget items, with coverage of expenditures at both the commitment and payment stages; the public accounts are prepared within 6 months of the end of the fiscal year, and include full information on revenue, expenditure, and financial assets and liabilities; and accounts are audited in a timely, professional and comprehensive manner, and appropriate action is taken on budget reports and audit findings.

Relationship to Growth and Poverty Reduction

Countries with more effective governments tend to achieve higher levels of economic growth by obtaining better credit ratings and attracting more investment, offering higher quality public services and encouraging higher levels of human capital accumulation, putting foreign aid resources to better use, accelerating technological innovation, and increasing the productivity of government spending.¹¹ Efficiency in the delivery of public services also has a direct impact on poverty.¹² On average, countries with more effective governments have better educational systems and more efficient health care.¹³ There is evidence that countries with independent, meritocratic bureaucracies do a better job of vaccinating children, protecting the most vulnerable members of society, reducing child mortality, and curbing environmental degradation.¹⁴ Countries with a meritocratic civil service also tend to have lower levels of corruption.¹⁵

Source

World Bank Institute (WBI), <u>http://www.govindicators.org</u>. Questions regarding this indicator may be directed to <u>governancewbi@worldbank.org</u>, 202-473-4557.

Methodology

The indicator is an index combining up to 19 different polls and surveys, depending on availability, which receive a different weight, depending on their estimated precision and country coverage. WBI draws on data, as applicable, from the Country Policy and Institutional Assessments of the World Bank, the African Development Bank and the Asian Development Bank, the Afrobarometer Survey, the World Bank's Business Environment and Enterprise Performance Survey, Business Environment Risk Intelligence's Business Risk Service, the Bertelsmann Foundation's Bertelsmann Transformation Index, Global Insight's Global Risk Service and Business Conditions and Risk Indicators, Brown University Center for Public Policy's Global E-Governance Index, the Economist Intelligence Unit's Country Risk Service, World Economic Forum's Global Competitiveness Report, the Gallup World Poll, the International Fund for Agricultural Development's Rural Sector Performance Assessments, the French Government's Institutional Profiles Database, the Latinobarometro Survey, Merchant International Group's Gray Area Dynamics, Political Risk Service's International Country Risk Guide, Institute for Management and Development's World Competitiveness Yearbook.

Rule of Law Indicator

This indicator measures the extent to individuals and firms have confidence in and abide by the rules of society; in particular, it measures the quality of contract enforcement, the police, and the courts, as well as the likelihood of crime and violence.

Countries are evaluated on the following factors:

- ★ public confidence in the police force and judicial system; popular observance of the law; a tradition of law and order; strength and impartiality of the legal system;
- ★ the extent to which laws and regulations affecting businesses and individuals are determined through transparent political or administrative processes, and are publicly announced;
- ★ prevalence of petty crime, violent crime, and organized crime; foreign kidnappings; economic impact of crime on local businesses; prevalence of human trafficking; government commitment to combating human trafficking;
- ★ the extent to which a well-functioning and accountable police force protects citizens and their property from crime and violence; when serious crimes do occur, the extent to which they are reported to the police and investigated;

- ★ security of private property rights; protection of intellectual property; the accuracy and integrity of the property registry; whether citizens are protected from arbitrary and/or unjust deprivation of property;
- ★ the enforceability of private contracts and government contracts;
- ★ the existence of an institutional, legal, and market framework for secure land tenure; equal access to land among men and women; effective management of common property resources; equitable user-rights over water resources for agriculture and local participation in the management of water resources;
- ★ the prevalence of tax evasion and insider trading; size of the informal economy;
- ★ independence, effectiveness, predictability, and integrity of the judiciary; compliance with court rulings; legal recourse for challenging government actions; ability to sue the government through independent and impartial courts; willingness of citizens to accept legal adjudication over physical and illegal measures; government compliance with judicial decisions, which are not subject to change except through established procedures for judicial review;
- ★ the independence of prosecutors from political direction and control;
- ★ the existence of effective and democratic civilian state control of the police, military, and internal security forces through the judicial, legislative, and executive branches; the police, military, and internal security services respect human rights and are held accountable for any abuses of power;
- ★ impartiality and nondiscrimination in the administration of justice; citizens are given a fair, public, and timely hearing by a competent, independent, and impartial tribunal; citizens have the right to independent counsel and those charged with serious felonies are provided access to independent counsel when it is beyond their means; low-cost means are available for pursuing small claims; citizens can pursue claims against the state without fear of retaliation;
- ★ protection of judges and magistrates from interference by the executive and legislative branches; judges are appointed, promoted, and dismissed in a fair and unbiased manner; judges are appropriately trained to carry out justice in a fair and unbiased manner; members of the national-level judiciary must give reasons for their decisions; existence of a judicial ombudsman (or equivalent agency or mechanism) that can initiate investigations and impose penalties on offenders;
- ★ law enforcement agencies are protected from political interference and have sufficient budgets to carry out their mandates; appointments to law enforcement agencies are made according to professional criteria; law enforcement officials are not immune from criminal proceedings;
- ★ the existence of an independent reporting mechanism for citizens to complain about police actions; timeliness of government response to citizen complaints about police actions.

Relationship to Growth and Poverty Reduction

Judicial independence is a key determinant of growth as it promotes a stable investment environment.¹⁶ On average, business environments characterized by consistent policies and credible rules, such as secure property rights and contract enforceability, create higher levels of investment and growth.¹⁷ Secure property rights and contract enforceability also have a positive impact on poverty by granting citizens secure rights to their own assets.¹⁸ Ordinary people, who tend not to have the resources or the connections to protect their rights informally, are usually the ones who are most in need of formal protection of their rights through efficient legal systems.¹⁹

Source

World Bank Institute (WBI), http://www.govindicators.org. Questions regarding this indicator may be directed to governancewbi@worldbank.org, 202-473-4557.

Methodology

The indicator is an index combining up to 26 different polls and surveys, depending on availability, each of which receives a different weight, depending on their estimated precision and country coverage. WBI draws on data, as applicable, from the Country Policy and Institutional Assessments of the World Bank, the African Development Bank, and the Asian Development Bank, the Afrobarometer Survey, the World Bank's Business Environment and Enterprise Performance Survey, Business Environment Risk Intelligence's Business Risk Service and Financial Ethics Index, the Bertelsmann Foundation's Bertelsmann Transformation Index, Freedom House's Nations in Transit and Countries at the Crossroads reports, Global Insight's Global Risk Service and Business Conditions and Risk Indicators, the Economist Intelligence Unit's Country Risk Service, World Economic Forum's Global Competitiveness Report, Global Integrity's Global Integrity Index, the Gallup World Poll, the Heritage Foundation's Index of Economic Freedom, Cingranelli-Richards' Human Rights Database, the International Fund for Agricultural Development's Rural Sector Performance Assessments, the French Government's Institutional Profiles Database, the Latinobarometro Survey, Merchant International Group's Gray Area Dynamics, Political Risk Service's International Country Risk Guide, the United States State Department's Trafficking in Persons Report, Vanderbilt University's Americas Barometer, Institute for Management and Development's World Competitiveness Yearbook.

Control of Corruption Indicator

This indicator measures the extent to which public power is exercised for private grain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.

Countries are evaluated on the following factors:

★ The prevalence of grand corruption and petty corruption at all levels of government;

- ★ The effect of corruption on the "attractiveness" of a country as a place to do business;
- ★ The frequency of "irregular payments" associated with import and export permits, public contracts, public utilities, tax assessments, and judicial decisions;
- ★ The frequency of "extra payments" to influence the content of new legislation;
- ★ Nepotism, cronyism and patronage in the civil service;
- ★ The estimated cost of bribery as a share of a company's gross revenues;
- ★ The perceived involvement of elected officials, border officials, tax officials, judges, and magistrates in corruption;
- ★ How well citizens think the current government is fighting corruption;
- ★ The strength of a government's anti-corruption laws, policies, and institutions;
- ★ Public trust in the financial honesty of politicians;
- ★ The extent to which legal contributions to political parties are misused by politicians;
- ★ The extent to which the influence of powerful firms with political ties imposes costs on other firms;
- ★ The extent to which processes are put in place for accountability and transparency in decision-making and disclosure of information at the local level;
- ★ The existence of an independent anti-corruption agency that receives regular funding, has a professional, full-time staff, regularly issues public reports, responds to citizen complaints in a timely manner, independently initiates investigations, possesses sufficient powers to carry out its mandate, and is protected from political interference;
- ★ The extent to which government authorities monitor the prevalence of corruption and implement sanctions transparently;
- ★ The extent to which conflict of interest and ethics rules for public servants are observed and enforced;
- ★ The extent to which the income and asset declarations of public officials are open to public and media scrutiny and verification;
- ★ The extent to which senior government officials are immune from prosecution under the law for malfeasance;
- ★ The extent to which the government provides victims of corruption with adequate mechanisms to pursue their rights;

- ★ The extent to which the tax administrator implements effective internal audit systems to ensure the accountability of tax collection;
- ★ The extent to which the executive budget-making process is comprehensive and transparent and subject to meaningful legislative review and scrutiny;
- ★ The extent to which the government ensures transparency, open-bidding, and effective competition in the awarding of government contracts;
- ★ The extent to which whistleblowers, anti-corruption activists, and investigators have a legal environment that protects them;
- ★ The extent to which allegations of corruption at the national and local level are thoroughly investigated and prosecuted without prejudice;
- ★ The extent to which government is free from excessive bureaucratic regulations, registration requirements, and/or other controls that increase opportunities for corruption;
- ★ The extent to which citizens have a legal right to information about government operations and can obtain government documents at a nominal cost.

Relationship to Growth and Poverty Reduction

Corruption hinders economic growth by increasing costs, lowering productivity, discouraging investment, reducing confidence in public institutions, limiting the development of small and medium-sized enterprises, weakening systems of public financial management, and undermining investments in health and education. ²⁰ Corruption can also increase poverty by slowing economic growth, skewing government expenditure in favor of the rich and well-connected, concentrating public investment in unproductive projects, promoting a more regressive tax system, siphoning funds away from essential public services, adding a higher level of risk to the investment decisions of low-income individuals, and reinforcing patterns of unequal asset ownership, thereby limiting the ability of the poor to borrow and increase their income. ²¹

Source

World Bank Institute (WBI), http://www.govindicators.org. Questions regarding this indicator may be directed to governancewbi@worldbank.org, 202-473-4557.

Methodology

The indicator is an index combining up to 25 different polls and surveys, depending on availability, each of which receive a different weight, depending on their estimated precision and country coverage. WBI draws on data, as applicable, from the *Country Policy and Institutional Assessments* of the World Bank, the Asian Development

Bank and the African Development Bank, the Afrobarometer Survey, the World Bank's Business Environment and Enterprise Performance Survey, Business Environment Risk Intelligence's Business Risk Service and Financial Ethics Index, the Bertelsmann Foundation's Bertelsmann Transformation Index, Freedom House's Nations in Transit and Countries at the Crossroads reports, Global Insight's Global Risk Service and Business Conditions and Risk Indicators, the Economist Intelligence Unit's Country Risk Service, Transparency International's Global Corruption Barometer survey, World Economic Forum's Global Competitiveness Report, Global Integrity's Global Integrity Index, the Gallup World Poll, the International Fund for Agricultural Development's Rural Sector Performance Assessments, the French Government's Institutional Profiles Database, the Latinobarometro Survey, Merchant International Group's Gray Area Dynamics, Political Economic Risk Consultancy's Corruption in Asia, Political Risk Service's International Country Risk Guide, Vanderbilt University Americas Barometer Survey, the Institute for Management and Development's World Competitiveness Yearbook.

Investing in People Category

The five indicators in this category measure investments in people, particularly women and children, by assessing the extent to which governments are promoting broad-based primary education, strengthening and building capacity to provide quality public health, reducing child mortality, and promoting the sustainable use of natural resources.

Health Expenditures Indicator

This indicator measures the government's commitment to investing in the health and well-being of its people.

Relationship to Growth and Poverty Reduction

MCC generally strives to measure outcomes rather than inputs, but health outcomes can be very slow to adjust to policy changes. Therefore, the Health Expenditures indicator is used to gauge the extent to which governments are making investments in the health and well-being of their citizens.²² A large body of literature links improved health *outcomes* to economic growth and poverty reduction.²³ While the link between expenditures and outcomes is never automatic in any country, it is generally positive when expenditures are managed and executed efficiently.²⁴ Research suggests that increased spending on health, when coupled with good policies and good governance, can promote growth, reduce poverty, and trigger declines in infant, child, and maternal mortality.²⁵

Source

World Health Organization (WHO), http://www.who.int/nha/en/. Questions regarding this indicator may be directed to nhaweb@who.int.

Methodology

This indicator measures general government health expenditure as a percentage of Gross Domestic Product (GDP). General government health expenditure (GGHE) includes outlays earmarked for health maintenance, restoration or enhancement of the health status of the population, paid for in cash or in kind by the following financing agents: central/federal, state/provincial/regional, and local/municipal authorities; extrabudgetary agencies, social security schemes; and parastatals. All can be financed through domestic funds or through external resources (mainly as grants passing through the government or loans channeled through the national budget). GGHE includes both recurrent and investment expenditures (including capital transfers) made during the year. The classification of the functions of government (COFOG) promoted by the United Nations, the International Monetary Fund (IMF), OECD and other institutions sets the boundaries for public outlays. Figures are originally estimated in million national currency units (million NCU) and in current prices. GDP data are primarily drawn from the United Nations National Accounts statistics.

Primary Education Expenditures Indicator

This indicator measures the government's commitment to investing in primary education.

Relationship to Growth and Poverty Reduction

While MCC generally strives to measures outcomes rather than inputs, educational outcome indicators can be very slow to adjust to policy changes, and adequate data on educational quality do not yet exist in a consistent manner across a large number of countries. Therefore, the Primary Education Expenditures indicator is used to gauge the extent to which governments are currently making investments in the education of their citizens. Research shows that, for given levels of quality, well-managed and -executed government spending on primary education can improve educational attainment and increase economic growth.²⁶ There is also evidence that the returns to education to an economy as a whole are larger than the private returns.²⁷ Investments in basic education are also critical to poverty reduction. Recent research shows that regions that begin with higher levels of education generally see a larger poverty impact of economic growth.²⁸

Source

The United National Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics is MCC's primary source of data, http://www.uis.unesco.org. UNESCO compiles primary education expenditure data from official responses to surveys and from reports provided by education authorities in each country. As a secondary source, MCC relies on Primary Education Expenditure data reported by national governments. In its data request to Candidate Countries, MCC requests inclusion of all government expenditures, including sub-national expenditures (both current and capital) and the consolidated public sector (i.e. state-owned enterprises and semi-autonomous institutions), but exclusion of donor funds unless it is not possible to disaggregate them. All data are

requested in current local currency (not a constant base year, not dollars). Questions regarding the UNESCO data may be directed to (514)-343-7752. Questions regarding the data reported by national governments can be directed to Sarah Rose, Development Policy Officer at the Millennium Challenge Corporation, at (202) 521-7251.

Methodology

UNESCO attempts to measure total current and capital expenditure on primary education at every level of administration—central, regional, and local. UNESCO data generally include subsidies for private education, but not foreign aid for primary education. UNESCO data may also exclude spending by religious schools, which plays a significant role in many developing countries.

In its data request to Candidate Countries, MCC asks that public expenditure on primary education be measured consistent with the IMF's definition of primary education expenditure in *Government Finance Statistics* (GFS Line 707), which in turn relies on the 1997 International Standard Classification of Education (ISCED-97). Government outlays on primary education include expenditures on services provided to individual pupils and students and expenditures on services provided on a collective basis. Primary education includes the administration, inspection, operation, or support of schools and other institutions providing primary education at ISCED-97 level 1. It also includes literacy programs for students too old for primary school.

Immunization Rates Indicator

This indicator measures a government's commitment to providing essential public health services and reducing child mortality.

Relationship to Growth and Poverty Reduction

The Immunization Rates indicator is widely regarded as a good proxy for the overall strength of a government's public health system.²⁹ It is designed to measure the extent to which governments are investing in the health and well-being of their citizens. Immunization programs can impact economic growth through their broader impact on health.³⁰ Healthy workers are more economically productive and more likely to save and invest; healthy children are more likely to reach higher levels of educational attainment; and healthy parents are better able to invest in the health and education of their children.³¹ Immunization programs also increase labor productivity among the poor, reduce spending to cope with illnesses, and lower mortality and morbidity among the main income-earners in poor families.³²

Source

The World Health Organization (WHO), http://www.who.int/immunization_monitoring/data/. Questions regarding this indicator may be directed to <u>vaccines@who.int</u> or +41 22 791 2873.

Methodology

MCC uses the simple average of the national diphtheria-pertussis-tetanus (DPT₃) vaccination rate and the measles vaccination rate. The DPT₃ immunization rate is measured as the number of children that have received their third dose of the diphtheria, pertussis (whooping cough), and tetanus toxoid vaccine divided by the number of children that have survived their first birthday. The measles immunization rate is measured as the number of children that have received their first dose of a measles-containing vaccine divided by the number of children that have survived their first birthday.

To estimate national immunization coverage, the WHO and the United Nations Children's Fund (UNICEF) draw on administrative data from service providers and household survey data on children's immunization histories. Estimates of the most likely true level of immunization coverage are based on the data available, consideration of potential biases, and contributions of local experts. Lack of precise information on the size of the cohort of one-year-old children can make immunization coverage difficult to estimate from program statistics.

Girls' Primary Education Completion Rate Indicator

This indicator measures a government's commitment to investing in basic education for girls in terms of access, enrollment, and retention.

Relationship to Growth and Poverty Reduction

Universal basic education is an important determinant of economic growth and poverty reduction. Empirical research consistently shows a strong positive correlation between girls' primary education and accelerated economic growth, slower population growth, higher wages, increased agricultural yields, and increased labor productivity.³³ A large body of literature also shows that increasing a mother's schooling has a large effect on her child's health, schooling, and adult productivity.³⁴ By one estimate, providing girls one extra year of education beyond the average can boost eventual wages by 10-20 percent.³⁵ The social benefits of female education are also demonstrated through lower fertility rates, higher immunization rates, decreased child and maternal mortality, reduced transmission of HIV, fewer cases of domestic violence, greater educational achievement by children, and increased female participation in government.³⁶

Source

UNESCO's Institute for Statistics (UIS), <u>http://www.uis.unesco.org</u>. Questions regarding this indicator may be directed to (514)-343-7752.

Methodology

The Girls' Primary Education Completion Rate is measured as the total number of female students enrolled in the last grade of primary (regardless of age), minus the number of female students repeating the last grade of primary, divided by the total female population of the entrance age of the last grade of primary. The primary completion rate reflects the primary cycle as defined by the International Standard Classification of Education (ISCED), ranging from three or four years of primary education (in a very small number of countries) to five or six years (in most countries), and seven (in a small number of countries). For the countries that changed the primary cycle, the most recent ISCED primary cycle is applied consistently to the whole series.

Natural Resource Management Indicator

This composite indicator measures a government's commitment to sound management of water resources and water systems, proper sewage disposal and sanitary control, air quality standards, habitat preservation, and biodiversity protection.

Relationship to Growth and Poverty Reduction

Sustainable natural resource management facilitates long-term economic growth by providing essential ecosystem services such as fertile soil, clean air and water, renewable energy, and genetic diversity.³⁷ Research suggests that sound management of land and water resources can boost both agricultural and non-agricultural productivity.³⁸ Access to clean water and sanitation services can also increase labor productivity by curbing the transmission of dengue, hepatitis A and E, cholera, dysentery, and diarrheal diseases, limiting the spread of malaria-infected mosquitoes, and making it easier for people to retain food and nutrients.³⁹ Poor people pay the price of environmental degradation every day: in days of work lost to illness from water-borne diseases; and in higher morbidity rates from pollution.⁴⁰ Poor women and older children, in particular, spend a significant number of daylight hours fetching water and solid fuels, thereby lowering their labor productivity.⁴¹

Source

Columbia University's Center for International Earth Science Information Network (CIESIN) and the Yale Center for Environmental Law and Policy (YCELP), http://sedac.ciesin.columbia.edu/es/mcc.html. Questions regarding this indicator may be directed to (845)-365-8988.

Methodology

This index is calculated as the un-weighted average of four indicators:

- ★ Eco-region Protection: Developed by CIESIN, this indicator assesses whether a country is protecting at least 10% of all of its biomes (e.g. deserts, forests, grasslands, and tundra). It is designed to capture the comprehensiveness of a government's commitment to habitat preservation and biodiversity protection. World Wildlife Fund provides the underlying eco-region data, and the United Nations Environment Program World Conservation Monitoring Center—in partnership with the International Union for Conservation of Nature (IUCN) World Commission on Protected Areas and the World Database on Protected Areas Consortium—provide the underlying data on protected areas.
- ★ Access to Improved Sanitation: Produced by WHO and UNICEF, this indicator measures the percentage of the population with access to facilities that hygienically separate human excreta from human, animal, and insect contact. Facilities such as sewers or septic tanks, poor-flush latrines and simple pit or ventilated improved pit latrines are assumed to be adequate, provided that they are not public.
- ★ Access to Improved Water: Produced by WHO and UNICEF, this indicator measures the percentage of the population with access to at least 20 liters of water per person per day from an "improved" source (household connections, public standpipes, boreholes, protected dug wells, protected springs, and rainwater collection) within one kilometer of the user's dwelling.
- ★ Child Mortality (Ages 1-4): Produced by the Population Division of the United Nations Department of Economic and Social Affairs, this indicator measures the probability of a child dying between the ages of 1 and 4. Because the causes of child mortality among 1-4 year olds are predominantly environmental, this indicator is considered to be an excellent proxy for underlying environmental conditions.

Encouraging Economic Freedom Category

The six indicators in this category measure the extent to which a government encourages economic freedom by assessing, *inter alia*, demonstrated commitment to economic policies that encourage individuals and firms to participate in global trade and international capital markets, promote private sector growth and the sustainable management of natural resources, protect private property rights, strengthen market forces in the economy.

Regulatory Quality Indicator

This indicator measures the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.

Countries are evaluated on the following factors:

★ prevalence of regulations and administrative requirements that impose a burden on business; ease of starting and closing a new business; ease of registering property;

- ★ government intervention in the economy; the extent to which government subsidies keep uncompetitive industries alive;
- ★ labor market policies; employment law provides for flexibility in hiring and firing; wage and price controls;
- ★ the complexity and efficiency of the tax system; pro-investment tax policies;
- ★ trade policy; the height of tariffs barriers; the number of tariff bands; the stability of tariff rates; the extent to which non-tariff barriers are used; the transparency and predictability of the trade regime;
- ★ the extent to which the customs service is free of corruption, operates transparently, relies on risk management, processes duty collections and refunds promptly;
- ★ the extent to which trade laws, regulations, and guidelines are published, simplified, and rationalized;
- ★ investment attractiveness; prevalence of bans or investment licensing requirements; financial regulations on foreign investment and capital; legal restrictions on ownership of business and equity by non-residents; foreign currency regulations; general uncertainty about regulation costs; legal regulation of financial institutions; the extent to which exchange rate policy hinders firm competitiveness;
- ★ extensiveness of legal rules and effectiveness of legal regulations in the banking and securities sectors; costs of uncertain rules, laws, or government policies;
- ★ the strength of the banking system; existence of barriers to entry in the banking sector; ease of access to capital markets; protection of domestic banks from foreign competition; whether interest rates are heavily-regulated; transfer costs associated with exporting capital;
- ★ the extent to which state intervention in the goods and land market is generally limited to regulation and/or legislation to smooth out market imperfections;
- ★ participation of the private sector in infrastructure projects; dominance of state-owned enterprises; openness of public sector contracts to foreign investors; the extent of market competition; effectiveness of competition and anti-trust policies and legislation;
- ★ corporate governance laws encourage ownership and financial disclosure and protect shareholder rights, and are generally enforced;
- ★ the existence of a policy, legal, and institutional framework that supports the development of a commercially-based, market-driven rural finance sector that is efficient, equitable, and accessible to low-income populations in rural areas;
- ★ the adoption of an appropriate policy, legal and regulatory framework to support the emergence and development of an efficient private rural business sector; the establishment of simple, fast and transparent procedures for establishing private agri-businesses;

★ the existence of a policy, legal and institutional framework supports the development and liberalization of commercially-based agricultural markets for inputs and produce that operate in a liberalized and private sector-led, functionally efficient and equitable manner, and that are accessible to small farmers.

Relationship to Growth and Poverty Reduction

Improved regulatory quality can promote economic growth by creating effective and efficient incentives for the private sector. Conversely, burdensome regulations have a negative impact on economic performance through economic waste and decreased productivity.⁴² Researchers at the International Finance Corporation argue that "improving from the worst ... to the best ... quartile of business regulations implies a 2.3 percentage point increase in average annual growth."⁴³ Good regulatory policies help the poor by creating opportunities for entrepreneurship, reducing opportunities for corruption, increasing the quality of public services, and improving the functioning of the housing, service, and labor markets on which they rely.⁴⁴

Source

World Bank Institute (WBI), http://www.govindicators.org. Questions regarding this indicator may be directed to governancewbi@worldbank.org, 202-473-4557.

Methodology

This indicator is an index combining up to 16 different polls and surveys, depending on availability, each of which receives a different weight, depending on their estimated precision and country coverage. WBI draws on data, as applicable, from the *Country Policy and Institutional Assessments* of the World Bank, the African Development Bank, and the Asian Development Bank, the World Bank's *Business Environment and Enterprise Performance Survey*, Bertelsmann Foundation's *Bertelsmann Transformation Index*, Global Insight's *Global Risk Service* and *Business Conditions and Risk Indicators*, the European Bank for Reconstruction and Development's *Transition Report*, the Economist Intelligence Unit's *Country Risk Service*, World Economic Forum's *Global Competitiveness Report*, the Heritage Foundation's *Index of Economic Freedom*, the International Fund for Agricultural Development's *Rural Sector Performance Assessments*, the French Government's *Institutional Profiles Database*, Merchant International Group's *Grey Area Dynamics*, Political Risk Service's *International Country Risk Guide*, Institute for Management and Development's *World Competitiveness Yearbook*.

Inflation Indicator

This indicator measures the government's commitment to sound monetary policy and private sector growth.

Relationship to Growth and Poverty Reduction

Research shows that high levels of inflation are detrimental to long-run growth.⁴⁵ High inflation creates an environment of risk and uncertainty, drives down the rate of investment, and is often associated with distorted relative prices and tax incentives.⁴⁶ Inflation can also hinder financial market development and create incentives for corruption.⁴⁷ In addition, inflation often has a direct negative impact on the poor. It is sometimes referred to as the "cruelest tax" because the poor are least able to protect their assets against inflation. When inflation is associated with swings in relative prices, it usually erodes real wages and distorts consumption decisions.⁴⁸

Source

IMF World Economic Outlook (WEO) database, http://www.imf.org. Questions regarding this indicator may be directed to weo@imf.org.

Methodology

This indicator measures the most recent 1-year change in consumer prices. The indicator reflects annual percentage change averages for the year, not end-of-period data.

Fiscal Policy Indicator

This indicator measures the government's commitment to prudent fiscal management and private sector growth.

Relationship to Growth and Poverty Reduction

Unsustainable fiscal deficits can impact economic growth by raising expectations of inflation or exchange rate depreciation.⁴⁹ Fiscal deficits driven by current expenditures decrease national savings and put upward pressure on real interest rates, which can lead to a crowding out of private sector activity.⁵⁰ In addition, fiscal deficits either force governments to increase tax rates, reducing the capital available for domestic investment, or to increase the stock of public debt. ⁵¹ High and growing levels of public debt have also led to financial and macroeconomic instability in many countries.⁵² Taken together, these factors decrease labor productivity and wages, thereby increasing poverty.⁵³

Source

IMF country reports, http://www.imf.org, and national sources. All data are cross-checked with other sources—in particular, the IMF's World Economic Outlook (WEO). Questions regarding this indicator may be directed to weo@imf.org.

Methodology

This indicator is measured as the overall budget deficit divided by GDP, averaged over a three-year period. In calculating the fiscal balance, donor funds are included in total expenditures and both revenues and expenditures include the consolidated public sector (i.e. state-owned enterprises and semi-autonomous institutions). If general government balance data were not available, MCC relied on central government balance data.

Business Start-Up Indicator

This indicator measures the time and cost of complying with all procedures officially required for an entrepreneur to start up and formally operate an industrial or commercial business.

Relationship to Growth and Poverty Reduction

The ability to start a business is important for encouraging entrepreneurship and economic growth.⁵⁴ Easing business entry into the formal economy can reduce unemployment, encourage investment, expand the tax base, help small entrepreneurs to access bank credit, allow workers to enjoy health insurance and pension benefits, and enable businesses to achieve economies of scale.⁵⁵ Research shows that formally registered businesses grow to more efficient sizes because they do not operate in fear of the authorities.⁵⁶ The International Finance Corporation has found that business start-up reforms "can add between a quarter and a half a percentage point to growth rates in the average developing economy."⁵⁷ Cost-related barriers to starting a business are particularly regressive in that they deny economic opportunities to the poor, due to their low levels of liquid capital.⁵⁸

Source

International Finance Corporation (IFC), http://www.doingbusiness.org. Questions regarding this indicator may be directed to doingbusiness@worldbank.org or (202) 473-5758.

Methodology

Local lawyers and other professionals examine specific regulations that impact the time and cost of opening a new business. The local lawyer and/or other professionals are instructed to record all generic procedures that are officially required for an entrepreneur to start up an industrial or commercial business. These include obtaining all necessary licenses and permits and completing any required notifications, verifications or inscriptions with relevant authorities. After a study of laws, regulations and publicly available information on business entry, a detailed list of procedures, time, cost and paid-in minimum capital requirements is developed. Subsequently, local incorporation lawyers and government officials complete and verify the data on applicable procedures, the time and cost of complying with each procedure under normal circumstances and the paid-in minimum capital. On average 4 law firms participate in each country. Information is also collected on the sequence in which procedures

are to be completed and whether procedures may be carried out simultaneously. It is assumed that any required information is readily available and that all government and non-government agencies involved in the start-up process function efficiently and without corruption. If answers by local experts differ, inquiries continue until the data are reconciled.

To make the data comparable across countries, several assumptions about the business and the procedures are used. The business:

- ★ is a limited liability company; if there is more than one type of limited liability company in the country, the most popular limited liability form among domestic firms is chosen. Information on the most popular form is obtained from incorporation lawyers or the statistical office;
- ★ operates in the country's most populous city;
- ★ is 100% domestically owned and has 5 owners, none of whom is a legal entity;
- ★ has start-up capital of 10 times income per capita at the end of 2007, paid in cash;
- ★ performs general industrial or commercial activities, such as the production or sale of products or services to the public; it does not perform foreign trade activities and does not handle products subject to a special tax regime, for example, liquor or tobacco; the business is not using heavily polluting production processes;
- ★ leases the commercial plant and offices and is not a proprietor of real estate;
- ★ does not qualify for investment incentives or any special benefits;
- ★ has up to 50 employees 1 month after the commencement of operations, all of them nationals;
- ★ has a turnover at least 100 times income per capita; and
- ★ has a company deed 10 pages long.

It is assumed that the minimum time required per procedure is 1 calendar day. Time captures the median duration that incorporation lawyers indicate is necessary to complete a procedure. Although procedures may take place simultaneously, they cannot start on the same day (that is, simultaneous procedures start on consecutive days). A procedure is considered completed once the company has received the final document, such as the company registration certificate or tax number. If a procedure can be accelerated for an additional cost, the fastest procedure is chosen. It is assumed that the entrepreneur does not waste time and commits to completing each remaining procedure without delay. The time that the entrepreneur spends on gathering information is ignored. It is assumed that the entrepreneur is aware of all entry regulations and their sequence from the beginning.

The text of the company law, the commercial code and specific regulations and fee schedules are used as sources for calculating the cost of start-up. If there are conflicting sources and the laws are not clear, the most authoritative source is used. The constitution supersedes the company law, and the law prevails over regulations and decrees. If

conflicting sources are of the same rank, the source indicating the most costly procedure is used, since an entrepreneur never second-guesses a government official. In the absence of fee schedules, a government officer's estimate is taken as an official source. In the absence of a government officer's estimate, estimates of incorporation lawyers are used. If several incorporation lawyers provide different estimates, the median reported value is applied. In all cases the cost excludes bribes.

The Business Start-Up composite indicator is calculated as the average of two indicators:

- ★ Days to Start a Business: This component measures the number of calendar days it takes to comply with all procedures that are officially required for an entrepreneur to start up and formally operate an industrial or commercial business. These include obtaining all necessary licenses and permits and completing any required notifications, verifications or inscriptions for the company and employees with relevant authorities.
- ★ Cost of Starting a Business: This component measures the cost of starting a business as a percentage of country's per capita income. The IFC records all procedures that are officially required for an entrepreneur to start up and formally operate an industrial or commercial business. These include obtaining all necessary licenses and permits and completing any required notifications, verifications or inscriptions for the company and employees with relevant authorities.

Land Rights and Access Indicator

This indicator evaluates whether and to what extent governments are investing in secure land tenure, which facilitates long-term investments in land productivity and diminishes the likelihood of short-term actions with negative environmental impacts such as slash-and-burn agriculture and deforestation.

Relationship to Growth and Poverty Reduction

Secure land tenure plays a central role in the economic growth process by giving people long-term incentives to invest and save their income, enhancing access to essential public services, allowing for more productive use of time and money than protecting land rights, facilitating use of land as collateral for loans, and contributing to social stability and local governance.⁵⁹ Improvements in tenure security also favor growth that is "pro-poor" because the benefits generally accrue to those who have not possessed such rights in the past and those who are affected most by high property registration costs.⁶⁰ In addition, land policy reform can be particularly meaningful for women. Research shows that when women have secure access to land and are able to exercise control over land assets, their ability to earn income is enhanced, household spending on healthcare, nutritious foods, and children's education increases, and human capital accumulation occurs at a faster rate. Women's ability to inherit and possess control rights to land also serves as a crucial social safety net.⁶¹

Source

International Fund for Agricultural Development (IFAD), http://www.ifad.org, and International Finance Corporation (IFC), http://www.doingbusiness.org. Questions regarding the IFAD indicator may be directed to +39 of 545 92377. Questions regarding the IFC indicators may be directed to doingbusiness@worldbank.org or (202) 473-5758.

Methodology

This composite indicator is calculated as the weighted average of three indicators:

- * Access to Land: Produced by IFAD, this indicator assesses the extent to which the institutional, legal and market framework provides secure land tenure and equitable access to land in rural areas. It is made up of five subcomponents: (1) the extent to which the law guarantees secure tenure for land rights of the poor; (2) the extent to which the law guarantees secure land rights for women and other vulnerable groups; (3) the extent to which land is titled and registered; (4) the functioning of land markets; and (5) the extent to which government policies contribute to the sustainable management of common property resources.
- ★ Days to Register Property: Produced by the IFC, this indicator measures how long it takes to register property in the capital city. The IFC records the full amount of time necessary when a business purchases land and a building to transfer the property title from the seller to the buyer so that the buyer can use the title for expanding business, as collateral in taking new loans, or, if necessary, to sell to another business.
- ★ Cost of Registering Property: Produced by the IFC, this indicator measures the cost to register property as a percentage of the value of the property in the capital city. The IFC records all of the costs that are incurred when a business purchases land and a building to transfer the property title from the seller to the buyer, so that the buyer can use it for expanding his business, as collateral in taking new loans, or, if necessary, to sell it to another business.

Access to Land is weighted 50% and Days and Cost to Register Property are each weighted 25%.

Trade Policy Indicator

This indicator measures a country's openness to international trade based on average tariff rates and non-tariff barriers to trade. Countries are rated on the following factors:

- ★ Weighted average tariff rates;
- ★ Non-tariff barriers (NTBs) such as import licenses, trade quotas, production subsidies, anti-dumping, countervailing, and safeguard measures, government procurement procedures, local content requirements,

excessive marking and labeling requirements, export assistance, export taxes, and tax concessions, and corruption in the customs service.

Relationship to Growth and Poverty Reduction

Trade openness can help to accelerate long run economic growth by allowing for greater economic specialization, encouraging investment and increasing productivity. Greater international competition can also force domestic firms to be more efficient and reduce rent seeking and corrupt activities. One study estimates that "open" economies on average register 2.2% higher economic growth than "closed" economies. Although the relationship between trade openness and poverty reduction is complex, research suggests trade liberalization can improve the livelihoods and real incomes of the poor through the availability of lower-cost import items, increases in the relative wages of laborers, net increases in tariff revenues as a result of lower rates and higher volume, and insulation of the economy from negative exogenous shocks.

Source

The Heritage Foundation, http://www.heritage.org/research/features/index/index.cfm and http://www.heritage.org/Research/TradeandForeignAid/bg2187.cfm. Questions regarding this indicator may be directed to Daniella.Markheim@heritage.org or (202)-608-6079.

Methodology

This indicator relies on the Heritage Foundation's Trade Freedom score. The indicator scale ranges from 0 to 100, where 0 represents the highest level of protectionism and 100 represents the lowest level of protectionism. The equation used to convert tariff rates and non-tariff barriers into this 0-100 percent scale is presented below:

$$Trade\ Policy_i = (Tariff_{max} - Tariff_i)/(Tariff_{max} - Tariff_{min}) - NTB_i$$

Trade Policy_i represents the trade freedom in country i, Tariff_{max} and Tariff_{min} represent the upper and lower bounds (50 and zero percent respectively), and Tariff_i represents the weighted average tariff rate in country i. The result is multiplied by 100 to convert it to a percentage. If applicable to country i, an NTB penalty of 5, 10, 15, or 20 percentage points is then subtracted from the base score, depending on the pervasiveness of NTBs.

In general, the Heritage Foundation uses the weighted average tariff rate (weighted by imports from the country's trading partners) as the tariff score. In the absence of weighted average applied tariff rate data, a country's average applied tariff rate is used. In the absence of average applied tariff rate data, the weighted average or the simple average of most favored nation tariff rates are used. In the very few cases where data on duties and customs revenues are not available, the authors rely on measures of international trade taxes. Data on tariffs and NTBs are obtained from the following sources in order of descending priority: the World Bank's *World Development Indicators* and

Data on Trade and Import Barriers: Trends in Average Tariff Rates for Developing and Industrial Countries; the World Trade Organization's Trade Policy Reviews; the Office of the U.S. Trade Representative's National Trade Estimate Report on Foreign Trade Barriers, the World Bank's Doing Business report, the U.S. Department of Commerce's Country Commercial Guide, the Economist Intelligence Unit's Country Reports, Country Profiles, and Country Commerce data, and "official government publications of each country."

(Endnotes)

- Pritchett, Lant H., Daniel Kaufmann, and Jonathan Isham. 1995. Civil Liberties, Democracy, and the Performance of Government Projects. *World Bank Economic Review* 11(2): 219. Clague, C., Keefer, P., Knack, S., and M. Olson. 1996. Property and contract rights in autocracies and democracies. *Journal of Economic Growth* 1(2): 243-276. Henisz, Witold J. 2000. The Institutional Environment for Economic Growth. *Economics and Politics* 12(1): 1-31. Rodrik, D. and Roman Wacziarg. 2005. Do Democratic Transitions Produce Bad Economic Outcomes? *American Economic Review Papers and Proceedings* 95(2): 50-55. Rodrik, Dani. 2000. Participatory Politics, Social Cooperation, and Economic Stability. *American Economic Review Papers and Proceedings* 90(2): 140-144. Rodrik, Dani. 2000. Institutions for High-Quality Growth: What They Are and How to Acquire Them. *Studies in Comparative International Development* 35(3): 3-31. Weingast, Barry. 1995. The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development. *Journal of Law, Economics, and Organization* 11: 1-31.
- Rodrik, Dani. 2000. Participatory Politics, Social Cooperation, and Economic Stability. *American Economic Review Papers and Proceedings* 90(2): 140-144. Djankov, Simeon, Tatiana Nenova, Caralee McLiesh, and Andrei Shleifer. 2003. Who owns the media? *Journal of Law and Economics* XLVI: 341-81. Brunetti, Aymo, and Beatrice Weder. 2003. A Free Press is Bad News for Corruption. *Journal of Public Economics* 87: 1801-1824. Sandholtz, Wayne, and William Koetlze. 2000. Accounting for Corruption: Economic Structure, Democracy, and Trade. *International Studies Quarterly* 44: 31-50; Lederman, Daniel, Norman Loayza, and Rodrigo Soares. 2005. Accountability and Corruption: Political Institutions Matter. *Economics and Politics* 17(1): 1-35. Adsera, Alicia, Carles Boix and Mark Payne. 2003. Are You Being Served? Political Accountability and Governmental Performance. *Journal of Law, Economics and Organization*. 19: 229-62. Rodrik, Dani. 1999. Where Did All the Growth Go? External Shocks, Social Conflict, and Growth Collapses *Journal of Economic Growth* 4(4): 385–412.
- Gupta, Sanjeev, Hamid R. Davoodi, and Rosa Alonso-Terme. 2002. Does Corruption Affect Income Inequality and Poverty. *Economics of Governance* 3: 23-45. Rivera-Batiz, Francisco L. 2002. Democracy, Governance, and Economic Growth: Theory and Evidence. *Review of Development Economics* 6(2): 225-47. Also see MCC's "Control of Corruption" webpage.
- Rodrik, D. and Roman Wacziarg. 2005. Do Democratic Transitions Produce Bad Economic Outcomes? *American Economic Review Papers and Proceedings* 95(2): 50-55. Rodrik, Dani. 2000. Participatory Politics, Social Cooperation, and Economic Stability. *American Economic Review Papers and Proceedings* 90(2): 140-144. Rigobon, Roberto and Dani Rodrik 2005. Rule of Law, Democracy, Openness and Income: Estimating the Interrelationships. *Economics of Transition* 13(3): 533- 564. Helliwell, J. 1994. Empirical linkages between democracy and economic growth. *British Journal of Political Science* April 24(2): 225. Baum, Matthew A., and David A. Lake. 2003. The Political Economy of Growth: Democracy and Human Capital. *American Journal of Political Science* 47(2):

333-347. Wacziarg, R. and José Tavares. 2001. How Democracy Affects Growth. European Economic Review 45(8): 1341-1379. Lederman, Daniel, Norman Loayza, and Rodrigo Soares. 2005. Accountability and Corruption: Political Institutions Matter. Economics and Politics 17(1): 1-35. Clague, C., Keefer, P., Knack, S., and M. Olson. 1996. Property and contract rights in autocracies and democracies. Journal of Economic Growth 1(2): 243-276. Henisz, Witold J. 2000. The Institutional Environment for Economic Growth. Economics and Politics 12(1): 1-31. Zweifel, Thomas D., and Patricio Navia. 2000. Democracy, Dictatorship, and Infant Mortality. *Journal of Democracy* 11:99-114. Brown, David. 1999. Reading, Writing, and Regime Type: Democracy's Impact on School Enrollment. Political Research Quarterly 52(4): 681-707. Stasavage, David. 2005. The Role of Democracy in Uganda's Move to Universal Primary Education. Journal of Modern African Studies 43(1): 53-73. Stasavage, David. 2005. Democracy and Education Spending in Africa. American Journal of Political Science 49(2): 343-358. Brown, David and Wendy Hunter. 2004. Democracy and Human Capital Formation: Education Spending in Latin America, 1980-1997. Comparative Political Studies 37(7): 842-864. Farzin, Y. Hossein, and Craig A. Bond. 2006. Democracy and environmental quality Journal of Development Economics 81(1): 213-235. McGuire, J.W. 2006. Democracy, Basic Service Utilization, and Under-5 Mortality: A Cross-National Study of Developing States. World Development 34(3):405–25. Ahlquist, J.S. 2006. Economic policy, institutions, and capital flows: portfolio and direct investment flows in developing countries. *International Studies Quarterly* 50(3): 681-704. Jensen, Nathan. 2003. Democratic Governance and Multinational Corporations. *International Organization* 57(3): 587-616. Henisz, Witold J. 2000. The Institutional Environment for Multinational Investment Journal of Law, Economics and Organization 16 (2): 334-364. Tsebelis, George. 1995. Decision Making in Political Systems: Veto Players in Presidentialism, Parliamentarism, Multicameralism, and Mulitpartyism. British Journal of Political Science 25(3): 289-325. Henisz, Witold J. 2004. Political Institutions and Policy Volatility. Economics and Politics 16(1): 1-27. Rodrik, Dani. 1999. Where Did All the Growth Go? External Shocks, Social Conflict, and Growth Collapses Journal of Economic Growth 4(4): 385-412. Rivera-Batiz, Francisco L. 2002. Democracy, Governance, and Economic Growth: Theory and Evidence. Review of Development Economics 6(2): 225-47. Besley, Tim, Torsten Persson, and Daniel Sturm. 2006. Political Competition and Economic Performance: Theory and Evidence from the United States. NBER Working Paper No. 11484.

Varshney, Ashtosh. 2000. Why Have Poor Democracies Not Eliminated Poverty? A Suggestion.

Asian Survey 40(5): 718-736. Persson, Torsten and Guido Tabellini. Democracy and Development: the Devil in the Details. NBER working paper 11993. January 2006. Halperin, Morton H, Joseph T. Seigle, and Michael M. Weinstein. 2005. The Democracy Advantage: How Democracies Promote Prosperity and Peace. New York: Routledge. Rodrik, D. and Roman Wacziarg. 2005. Do Democratic Transitions Produce Bad Economic Outcomes? American Economic Review Papers and Proceedings 95(2): 50-55. Quinn, Dennis, and John Woolley. 2001. Democracy and National Economic Performance: The Preference for Economic Stability. American Journal of Political Science 45(3). Jalan, Jyotsna, and Martin Ravallion. 1999. Are the Poor Less Well Insured: Evidence on Vulnerability to Income Risk in Rural China. Journal of Development Economics 58(1): 61-82.

- Bueno de Mesquita, Bruce, Alastair Smith, Randolph M. Siverson, and James D. Morrow. 2003. *The Logic of Political Survival*. Cambridge, Mass.: MIT Press. Besley, Timothy and Robin Burgess. 2002. The Political Economy of Government Responsiveness: Theory and Evidence From India. *Quarterly Journal of Economics*. 117(4): 1415–451. Hirschman, Albert O. 1970. *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*. Cambridge, Mass.: Harvard University Press. Paul, Samuel. 1992. Accountability in Public Services: Exit, Voice and Control. *World Development* 20(7): 1047-1060. There is also some empirical evidence linking democratic institutions to poverty reduction. See Li, H., Squire, L., and H. Zou. 1998. Explaining International and Intertemporal Variations in Income Inequality. *Economic Journal* 108: 26-43. Dollar, David and Aart Kraay. 2002. Growth is Good for the Poor. *Journal of Economic Growth* 7: 195-225. Arimah, Ben C. 2004. Poverty Reduction and Human Development in Africa. *Journal of Human Development* 5(3): 399-415. Kosack, S. 2003. Effective Aid: How Democracy Allows Development Aid to Improve the Quality of Life. *World Development* 31(1): 1-22.
- 7 Sen, A. 2000. *Development as Freedom*, New York: Anchor.
- Rodrik, Dani. 2000. Participatory Politics, Social Cooperation, and Economic Stability. American Economic Review Papers and Proceedings 90(2): 140-144...Claessens, Stijn, and Enrico Perotti. 2005. The Links Between Finance and Inequality: Channels and Evidence. Background paper for the World Development Report 2006. Washington D.C.: World Bank. Brunetti, A., Kisunko, G., and B. Weder. 1998. Credibility of rules and economic growth: evidence from a worldwide survey of the private sector. World Bank Economic Review 12, 353-384. Wacziarg, R. and José Tavares. 2001. How Democracy Affects Growth. European Economic Review 45(8): 1341-1379. Milner, Helen and Keiko Kubota. 2005. Why the Move to Free Trade? Democracy and Trade Policy in the Developing Countries. International Organization 59(1): 107-143. Baum, Matthew A., and David A. Lake. 2003. The Political Economy of Growth: Democracy and Human Capital. American Journal of Political Science 47(2): 333-347. Lake, David A., and Matthew Baum. 2001. The Invisible Hand of Democracy: Political Control and the Provision of Public Services. Comparative Political Studies 34 (6): 587-621. Clague, C., Keefer, P., Knack, S., and M. Olson. 1996. Property and contract rights in autocracies and democracies. *Journal of Economic* Growth 1(2): 243-276. Acemoglu, D., S. Johnson, and J. A. Robinson. 2001. The Colonial Origins of Comparative Development: An Empirical Investigation. American Economic Review 91(5): 1369-1401. Feng, Y. 1997. Democracy, Political Stability and Economic Growth. British Journal of Political Science 27: 391-418. Persson, T., and G. Tabellini. 1994. Is Inequality Harmful for Growth? American Economic Review 84: 600-621. Alesina, A., and R. Perotti. 1996. Income distribution, political instability and investment. European Economic Review 40(6): 1203-1228. Knack, S., and P. Keefer. 1997. Does social capital have a payoff? A cross-country investigation. Quarterly Journal of Economics 112: 1251-1288. Brunetti, Aymo and Beatrice Weder. 2003. A Free Press is Bad News for Corruption. Journal of Public Economics 87: 1801-1824. Lederman, Daniel, Norman Loayza, and Rodrigo Soares. 2005. Accountability and Corruption: Political Institutions Matter. Economics and Politics 17(1): 1-35. Putnam, Robert D. 1993. Making Democracy Work: Civic Traditions in Modern Italy. Princeton: Princeton University Press. Barro, Robert J. 1996. Democracy and Growth. Journal of Economic Growth 1(1): 1-27. Tsebelis, George. 1995.

Decision Making in Political Systems: Veto Players in Presidentialism, Parliamentarism, Multicameralism, and Mulitpartyism. *British Journal of Political Science* 25(3): 289–325. Henisz, Witold J. 2004. Political Institutions and Policy Volatility. *Economics and Politics* 16(1): 1-27. Rodrik, Dani. 1999. Where Did All the Growth Go? External Shocks, Social Conflict, and Growth Collapses *Journal of Economic Growth* 4(4): 385–412. Easterly, William. 2006. Plannners vs. Searchers in Foreign Aid. Paper prepared for Asian Development Bank's Distinguished Speakers Program. Manila: Asian Development Bank. Rivera-Batiz, Francisco L. 2002. Democracy, Governance, and Economic Growth: Theory and Evidence. *Review of Development Economics* 6(2): 225-47. Islam, Roumeen. 2006. Does more transparency go along with better governance? *Economics and Politics* 18(2): 121-167. Besley, Tim, Torsten Persson, and Daniel Sturm. 2006. Political Competition and Economic Performance: Theory and Evidence from the United States. NBER Working Paper No. 11484. Svensson, J. 1999. Aid, Growth and Democracy. *Economics and Politics* 11(3): 275-297. Kosack, S. 2003. Effective Aid: How Democracy Allows Development Aid to Improve the Quality of Life. *World Development* 31(1): 1-22.

- Bueno de Mesquita, Bruce, Alastair Smith, Randolph M. Siverson, and James D. Morrow. 2003. *The Logic of Political Survival*. Cambridge, Mass.: MIT Press. Besley, Timothy and Robin Burgess. 2002. The Political Economy of Government Responsiveness: Theory and Evidence From India. *Quarterly Journal of Economics*. 117(4): 1415–451. Hirschman, Albert O. 1970. *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*. Cambridge, Mass.: Harvard University Press. Paul, Samuel. 1992. Accountability in Public Services: Exit, Voice and Control. *World Development* 20(7): 1047-1060.
- Wacziarg, R. and José Tavares. 2001. How Democracy Affects Growth. *European Economic Review* 45(8): 1341-1379. Baum, Matthew A., and David A. Lake. 2003. The Political Economy of Growth: Democracy and Human Capital. American Journal of Political Science 47(2): 333-347. Lake, David A., and Matthew Baum. 2001. The Invisible Hand of Democracy: Political Control and the Provision of Public Services. *Comparative Political Studies* 34 (6): 587-621. Brown, David. 1999. Reading, Writing, and Regime Type: Democracy's Impact on School Enrollment. *Political Research Quarterly* 52(4): 681-707. Stasavage, David. 2005. The Role of Democracy in Uganda's Move to Universal Primary Education. *Journal of Modern African Studies* 43(1): 53-73. Stasavage, David. 2005. Democracy and Education Spending in Africa. *American Journal of Political Science* 49(2): 343-358. Brown, David and Wendy Hunter. 2004. Democracy and Human Capital Formation: Education Spending in Latin America, 1980-1997. *Comparative Political Studies* 37(7): 842-864. Farzin, Y. Hossein, and Craig A. Bond. 2006. Democracy and environmental quality *Journal of Development Economics* 81(1): 213–235. McGuire, J.W. 2006. Democracy, Basic Service Utilization, and Under-5 Mortality: A Cross-National Study of Developing States. *World Development* 34(3):405–25. Besley, Timothy and Masayuki Kudamatsu. 2006. Health and Democracy. *American Economic Review* 96(2): 313-318.
- Burnside, C. and David Dollar. 2000. Aid, Policies and Growth. *American Economic Review* 90(4): 847-868. Burnside, C. and David Dollar. 2000. "Aid, Growth, the Incentive Regime, and Poverty Reduction." in *The*

World Bank: Structure and Policies, edited by Christopher L. Gilbert and David Vines. Oxford: Oxford University Press. Brunetti, Aymo. 1998. Policy Volatility and Economic Growth: A Comparative, Empirical Analysis. European Journal of Political Economy 14: 35-52. Fatas, Antonio, and Ilian Mihov. 2005. Policy Volatility, Institutions and Economic Growth. INSEAD. Brunetti, A., Kisunko, G., and B. Weder. 1998. Credibility of rules and economic growth: evidence from a worldwide survey of the private sector. World Bank Economic Review 12, 353-384. Asteriou, Dimitrios, and Simon Price. 2005. Uncertainty, Investment and Economic Growth: Evidence from a Dynamic Panel. Review of Development Economics 9(2): 277-288. Sarte, P.-D. G. 2001. Rent-Seeking Bureaucracies and Oversight in a Simple Growth Model. Journal of Economic Dynamic and Control. 25: 1345-1365. Ayal, E., and G. Karras. 1996. Bureaucracy, investment, and growth. Economics Letters. 51(2): 233-259. Baum, Matthew A., and David A. Lake. 2003. The Political Economy of Growth: Democracy and Human Capital. American Journal of Political Science. 47: 333-347. Easterly, William, Jozef Ritzen, and Michael Woolcock. 2006. Social Cohesion, Institutions, and Growth. Economics & Politics 18(2): 103-120. Rauch, James E., and Peter B. Evans. 2000. Bureaucratic Structure and Bureaucratic Performance in Less Developed Countries. Journal of Public Economics 75: 49-71. Ayal, E., and G. Karras. 1996. Bureaucracy, investment, and growth. Economics Letters 51(2): 233-259. Corsi, Marcella, Andrea Gumina, and Carlo D'Ippoliti. 2006. eGovernment Economics Project (eGEP) Economic Model Final Version." eGovernment Unit, European Commission. Kaufmann, Daniel, and Aart Kraay. 2002. Growth without Governance. Economia 3: 169-229. Rajkumar, A.S. and V. Swaroop. 2002: Public Spending and Outcomes: Does. Governance Matter? World Bank Policy Research Working Paper 2840. Hall, Robert E. and Charles Jones. Why Do Some Countries Produce So Much More Output per Worker than Others? Quarterly Journal of Economics 114: 83-116. Keefer, Phillip and Steve Knack. Forthcoming. Boondoggles, Rent-seeking and Political Checks and Balances: Public Investment Under Unaccountable Governments. Review of Economics and Statistics. Evans, Peter and James Rauch. 1999. Bureaucracy and Growth: A Cross-National Analysis of the Effects of 'Weberian' State Structures on Economic Growth. American Sociological Review 64(5): 748-765.

- Gupta, Sanjeev, Hamid R. Davoodi, and Rosa Alonso-Terme. 2002. Does Corruption Affect Income Inequality and Poverty? *Economics of Governance* 3: 23-45. Chong, Alberto and César Calderón. 2000. Institutional quality and poverty measures in a cross-section of countries. *Economics of Governance* 1(2): 123-135. Abed, George T. and Sanjeev Gupta (eds.). 2002. *Governance, Corruption and Economic Performance*. Washington D.C.: International Monetary Fund. Léautier, Frannie (ed.). 2006. *Cities in a Globalizing World Governance, Performance, and Sustainability*. Washington D.C.: World Bank.
- Lewis, Maureen. 2006. Governance and Corruption in Public Health Care Systems. Center for Global Development Working Paper 78. Washington D.C.: Center for Global Development. Baldacci, E., Benedict Clements, Sanjeev Gupta and Qiang Cui. 2004. Social Spending, Human Capital and Growth in Developing Countries: Implications for Achieving the MDGs. IMF Working Paper 04/217.

- Lewis, Maureen. 2006. Governance and Corruption in Public Health Care Systems. Center for Global Development Working Paper 78. Washington D.C.: Center for Global Development. Esty, Daniel and Michael Porter. 2005. National environmental performance: an empirical analysis of policy results and determinants. *Environment and Development Economics* 10: 391–434.
- Rauch, James E. 2001. Leadership Selection, Internal Promotion, and Bureaucratic Corruption in Less Developed Polities. *Canadian Journal of Economics* 34(1): 240–258. World Bank. 2003. *Understanding Public Sector Performance in Transition Countries—An Empirical Contribution*. Washington, D.C.: World Bank.
- Henisz, Witold J. 2000. The Institutional Environment for Economic Growth. *Economics and Politics* 12(1): 1-31. Feld, Lars, and Voigt, Stefan. 2003. Economic growth and judicial independence: cross-country evidence using a new set of indicators. *European Journal of Political Economy* 19(3): 497-527.
- Brunetti, A., Kisunko, G., Weder, B., 1998. Credibility of rules and economic growth: evidence from a 17 worldwide survey of the private sector. World Bank Economic Review 12, 353-384. Rigobon, Roberto and Dani Rodrik 2005. Rule of Law, Democracy, Openness and Income: Estimating the Interrelationships. *Economics of* Transition 13(3): 533-564. Knack, Steve, Chris Clague, Phil Keefer, and Mancur Olson. 1999. Contract-Intensive Money: Contract Enforcement, Property Rights, and Economic Performance. Journal of Economic Growth: 4: 185– 211. Rodrik, Dani, Subramanian, Arvind, and Francesco Trebbi. 2004. Institutions Rule: The Primacy of Institutions Over Geography and Integration in Economic Development. Journal of Economic Growth 9(2): 131-165. Easterly, William, Jozef Ritzen, and Michael Woolcock. 2006. Social Cohesion, Institutions, and Growth. Economics and Politics 18(2): 103-120. Rodrik, D. (ed.) 2003. In Search of Prosperity: Analytic Narratives on Economic Growth. Princeton: Princeton University Press. North, D.C. 1981. Structure and Change in Economic History. New York: W. W. Norton & Co. Svensson, J. 1998. Investment, Property Rights and Political Instability: Theory and Evidence. European Economic Review 42(7): 1317-1341. Johnson, McMillan, and Woodruff. 2002. Property Rights and Finance. The American Economic Review 92(5): 1335-1356. Besley, Timothy. 1995. Property Rights and Investment Incentives: Theory and Evidence form Ghana. Journal of Political Economy 103(5): 905-93. Keefer, P., and S. Knack. 2002. Polarization, Politics, and Property Rights: Links between Inequality and Growth. *Public Choice* 111(1–2): 127-54. Mauro, Paolo. 1995. Corruption and Growth. Quarterly Journal of Economics, 110: 681-712. Hall, R., and C. Jones. 1999. Why Do Some Countries Produce So Much More Output per Worker than Others? Quarterly Journal of Economics 114: 83-116. Rodrik, Dani. 1999. Where Did All the Growth Go? External Shocks, Social Conflict, and Growth Collapses Journal of Economic Growth 4(4): 385-412. Tornell, A., Velasco, A., 1992. The tragedy of the commons and economic growth: Why does capital flow from poor to rich countries. *Journal of* Political Economy 100: 1208-1231.
- 18 Chong, Alberto and César Calderón. 2000. Institutional quality and poverty measures in a cross-section of countries. *Economics of Governance* 1(2): 123-135. Dollar, D and A. Kraay 2002. Growth is Good for the Poor.

Journal of Economic Growth 7(3): 195-225. World Bank. 2005. Pro-Poor Growth in the 1990s: Lessons and Insights from 14 Countries. Washington D.C.: World Bank.

- World Bank. 2003. *Land Policies for Growth and Poverty Reduction*. Washington D.C.: World Bank. Ghani, Ashraf. 2006. Economic development, poverty reduction, and the rule of law: Lessons from East Asia, successes and failures. High Level Commission on Legal Empowerment of the Poor. World Bank. 2006. *Doing Business* 2007: How to Reform. Washington D.C.: World Bank.
- 20 Lambsdorff, Johann. 2003a. How Corruption Affects Persistent Capital Flows. Economics of Governance 4: 229-243. Lambsdorff, Johann. 2003b. How Corruption Affects Productivity. Kyklos 56: 457-474. Pellegrini, L. and R. Gerlagh. 2004. Corruption's effect on growth and its transmission channels. Kylos 57(3): 429-456. Fisman, Raymond and Jakob Svensson. 2007. Are corruption and taxation really harmful to growth? Firm level evidence. Journal of Development Economics 83: 63-75. Friedman, Eric, Simon Johnson, Daniel Kaufmann, and Pablo Zoido-Lobaton 2000. Dodging the Grabbing Hand: The Determinant of Unofficial Activity in 69 Countries. Journal of Public Economics 76: 459-493. Mauro, Paolo 1995. Corruption and Growth. Quarterly Journal of Economics 110:681-712. Kaufmann, Daniel, and Aart Kraay. 2002. Growth without Governance. Economia 3: 169-229. Ciocchini, Francisco, Erik Durbin, and David T.C. Ng. 2003. Does Corruption Increase Emerging Market Bond Spreads? Journal of Economics and Business 55: 503-528. Anderson, Christopher J., and Yuliya V. Tverdova. 2003. Corruption, Political Allegiances, and Attitudes Toward Government in Contemporary Democracies. American Journal of Political Science 47: 91-109. Abed, George T. and Sanjeev Gupta (eds.). 2002. Governance, Corruption and Economic Performance. Washington D.C.: International Monetary Fund. Ades, Alberto, and Rafael Di Tella. 1999. Rents, Competition, and Corruption. American Economic Review 89 (4): 982-993. Li. Hongyi, Lixin Colin Xu, and Heng-Fu Zou 2000. Corruption, Income Distribution, and Growth. Economics and Politics 12:155-182. Johnson, Simon, Daniel Kaufmann, John McMillan, and Christopher Woodruff. 2000. Why do firms hide? Bribes and unofficial activity after communism. Journal of Public Economics 76: 495-520. Wei, Shang-Jin. 2000. How Taxing is Corruption on International Investors? Review of Economics and Statistics 82:1-11. Del Monte, Alfredo, and Erasmo Papagni. 2001. Public Expenditure, Corruption, and Economic Growth: The Case of Italy. European Journal of Political Economy 17: 1-16.
- Gupta, Sanjeev, Hamid R. Davoodi, and Rosa Alonso-Terme. 2002. Does Corruption Affect Income Inequality and Poverty? *Economics of Governance* 3: 23-45. Ravallion, M., and S. Chen. 1997. What Can New Survey Data Tell Us About Recent Changes in Distribution and Poverty? *World Bank Economic Review* 11(2): 357–382Gupta, Sanjeev, Hamid R. Davoodi, and Erwin R. Tiongson. 2001. "Corruption and the Provision of Health Care and Education Services," in *The Political Economy of Corruption*, edited by Arvind K. Jain. London: Routledge. Mauro, P. 1998. Corruption and the Composition of Government Expenditure. *Journal of Public Economics* 69: 263–279. Rajkumar, A.S. and V. Swaroop. 2002: Public Spending and Outcomes: Does. Governance Matter? World Bank Policy Research Working Paper 2840. Anderson, James, Daniel Kaufmann, Francesca Recanatini.

2003. Service Delivery, Poverty and Corruption—Common Threads from Diagnostic Surveys. Background paper for 2004 World Development Report. Washington DC: World Bank. Olken, Benjamin. 2006. Corruption and the Costs of Redistribution: Micro Evidence from Indonesia. *Journal of Public Economics* 90 (4-5): 853-870.

- Becker, Loren, Jessica Pickett, Ruth Levine. 2006. Measuring Commitment to Health: Global Health Indicators Working Group Report. Washington D.C.: Center for Global Development.
- Bloom, D. E., Canning, D., Sevilla, J. 2004. The Effect of Health on Economic Growth: A Production Function Approach. *World Development* 32(1): 1-13. Alok Bhargava, Dean T. Jamison, Lawrence J. Lau and Christopher J. L. Murray. 2001. Modeling the Effects of Health on Economic Growth. *Journal of Health Economics* 20(3): 423-40. Baldacci, E., Benedict Clements, Sanjeev Gupta and Qiang Cui. 2004. Social Spending, Human Capital and Growth in Developing Countries: Implications for Achieving the MDGs. IMF Working Paper 04/217. Gyimah-Brempong K. and M. Wilson. 2004. Human Capital and Economic Growth in Sub-Saharan Africa and OECD Countries. *Quarterly Review of Finance and Economics* 44: 296-320.
- Filmer, D. and Pritchett, L. 1999. The impact of public spending on health: Does money matter? *Social Science & Medicine* 49 (10):1309–23. Filmer, Deon, Jeffrey S. Hammer, and Lant Pritchett. 2000. Weak Links in the Chain: A Diagnosis of Health Policy in Poor Countries. *World Bank Research Observer* 15 (2):199-224. Castro-Leal, F., J.Dayton, L. Demery, and K.Mehra. 1999. Public Social Spending in Africa: Do the Poor Benefit? *World Bank Research Observer* 14(1):49–72. Keefer, Philip and Stuti Khemani. 2005. Democracy, Public Expenditures, and the Poor: Understanding Incentives for Providing Public Services. *World Bank Research Observer* 20 (1): 1-27.
- Baldacci, E., Benedict Clements, Sanjeev Gupta and Qiang Cui. 2004. Social Spending, Human Capital and Growth in Developing Countries: Implications for Achieving the MDGs. IMF Working Paper 04/217.

 Ghobarah, Hazem Adam, Paul Huth, and Bruce Russett. 2004. Comparative Public Health: The Political Economy of Human Misery and Well-Being. *International Studies Quarterly* 48:73-94. Gupta, I. and Mitra, A. 2004.

 Economic Growth, Health and Poverty: An Exploratory Study for India. *Development Policy Review* 22(2): 193-206. Houweling, Tanja AJ, Caspar, Anton E Kunst, Looman, WN, and Mackenbach, Johan P. 2005. Determinants of under-5 mortality among the poor and the rich: a cross-national analysis of 43 developing countries. *International Journal of Epidemiology* 34(6): 1257-1265. Gupta, S., M. Verhoeven, and E. R. Tiongson. 2003. Public spending on health care and the poor. *Health Economics* 12(8): 685-96. Bidani, B., and M. Ravallion. 1997. Decomposing Social Indicators Using Distributional Data. *Journal of Econometrics* 77(1): 125-139. Wagstafff, A. 2003. Child Health on a Dollar a Day: Some Tentative Cross-Country Comparisons. *Social Science Medicine* 57(9): 1529-1538. Rajkumar, A.S. and V. Swaroop. 2002: Public Spending and Outcomes: Does. Governance Matter? World Bank Policy Research Working Paper 2840.
- Rajkumar, A.S. and V. Swaroop. 2002: Public Spending and Outcomes: Does. Governance Matter?

 World Bank Policy Research Working Paper 2840. Baldacci, E., Benedict Clements, Sanjeev Gupta and Qiang

Cui. 2004. Social Spending, Human Capital and Growth in Developing Countries: Implications for Achieving the MDGs. IMF Working Paper 04/217. Rajkumar, A.S. and V. Swaroop. 2002: Public Spending and Outcomes: Does. Governance Matter? World Bank Policy Research Working Paper 2840. Castro-Leal, F., J.Dayton, L. Demery, and K.Mehra. 1999. Public Social Spending in Africa: Do the Poor Benefit? *World Bank Research Observer* 14(1):49–72. Barro, R. J. 1991. Economic Growth in a Cross Section of Countries. *Quarterly Journal of Economics* 106 (2):407-43. Krueger, Alan, and Mikael Lindahl. 2001. Education for Growth: Why and for Whom? *Journal of Economic Literature* 39 (4): 1101–36.

- Moretti, E. 2004. Estimating the Social Return to Higher Education: Evidence From Longitudinal and Repeated Cross-Sectional Data. *Journal of Econometrics* 121(1-2).
- Datt, Gaurav and Martin Ravallion. 1998. Why have Some Indian States Done Better than Others at Reducing Rural Poverty? *Economica* 65: 17-38. Christiaensen, L., L. Demery, and S. Paternostro. 2003. Macro and Micro Perspectives of Growth and Poverty in Africa. *The World Bank Economic Review* 17: 317-334.
- Becker, Loren, Jessica Pickett, Ruth Levine. 2006. Measuring Commitment to Health: Global Health Indicators Working Group Report. Washington D.C.: Center for Global Development.
- Bloom, D. E., Canning, D., Sevilla, J. 2004. The Effect of Health on Economic Growth: A Production Function Approach. *World Development* 32(1): 1-13. Alok Bhargava, Dean T. Jamison, Lawrence J. Lau and Christopher J. L. Murray. 2001. Modeling the Effects of Health on Economic Growth. *Journal of Health Economics* 20(3): 423-40. Baldacci, E., Benedict Clements, Sanjeev Gupta and Qiang Cui. 2004. Social Spending, Human Capital and Growth in Developing Countries: Implications for Achieving the MDGs. IMF Working Paper 04/217. Gyimah-Brempong K. and M. Wilson. 2004. Human Capital and Economic Growth in Sub-Saharan Africa and OECD Countries. *Quarterly Review of Finance and Economics* 44: 296-320. Doppelhofer, G., R. Miller and X. Sala-i-Martin. 2004. Determinants of Long-Term Growth: A Bayesian Averaging of Classical Estimates Approach. *American Economic Review* 94(4): 813-835.
- Bloom, David E., David Canning & Mark Weston. The Value of Vaccination. *World Economics* 6(3): 15-39. Miguel, Edward, and Kremer, Michael. 2004. Worms: Identifying Impacts on Education and Health the Presence of Treatment Externalities. *Econometrica* 72(1): 159–217.
- Fairbank, A., Makinen, M., Schott, W., and Sakagawa, B. 2000. Poverty Reduction and Immunizations. Bethesda, Maryland: Abt Associates, Inc.
- Klasen, Stephan. 2002. Low Schooling for Girls, Slower Growth for All? *World Bank Economic Review* 16(3): 345-373. Schultz, T. Paul. 2002. Why governments should invest more to educate girls. *World Development* 30(2): 212. Psacharopoulos, George and Harry Anthony Patrinos. 2004. Returns to investment in education: a further update. *Education Economics* 12(2): 111-134. Deolalikar, Anil B. 1993. Gender Differences in the Returns to

Schooling and in School Enrollment Rates in Indonesia. *Journal of Human Resources* 28 (4): 899–932. Summers, Lawrence H. 1994. Investing in all the people: educating women in developing countries. EDI Seminar Paper No. 45, Washington, D.C.: World Bank. Ravallion, M., and Datt, G. 2002. Why has economic growth been more propoor in some states of India than others? *Journal of Development Economics* 68 (2): 381-400. Christiaensen, L., L. Demery, and S. Paternostro. 2003. Macro and Micro Perspectives of Growth and Poverty in Africa. *The World Bank Economic Review* 17: 317-334. David Dollar and Roberta Gatti. 1999. Gender inequality, income, and growth: Are good times good for women? World Bank Policy Research Report on Gender and Development Working Paper Series No. 1. World Bank: Washington, D.C. Lisa Smith and Lawrence Haddad. 1996. Male-female difference in agricultural productivity: methodological issues and empirical evidence. *World Development* 24 (10): 1579-95. World Bank. 2001. *Engendering Development: Through Gender Equality in Rights, Resources, and Voice*. New York: Oxford University Press.

- Schultz, T. Paul. 2002. Why governments should invest more to educate girls. World Development 30(2): 34 212. Lavy, Victor. 1996. School Supply Constraints and Children's Educational Outcomes in Rural Ghana. Journal of Development Economics 51 (2): 291-314. Ridker, Ronald G., ed. 1997. Determinants of Educational Achievement and Attainment in Africa: Findings from Nine Case Studies. SD Publication Series, Technical Paper No. 62. Washington, D.C.: U.S. Agency for International Development. Alderman, Harold, and Elizabeth M. King. 1998. Gender Differences in Parental Investment in Education Structural Change and Economic Dynamics 9 (4): 453–68. Filmer, D. 2000. The Structure of Social Disparities in Education: Gender and Wealth. Prepared as background paper for Engendering Development: Through Gender Equality in Rights, Resources, and Voice. New York: Oxford University Press. Filmer, Deon. 2000. The Structure of Social Disparities in Education: Gender and Wealth. Policy Research Working Paper No. 2268, World Bank Development Research Group/Poverty Reduction and Economic Management Network. Washington, D.C.: World Bank. Klasen, Stephan. 1999. Does Gender Inequality Reduce Growth and Development? Evidence from Cross-Country Regressions. Policy Research Report on Gender and Development Working Paper No. 7. Washington, D.C.: World Bank. Klasen, Stephan. 2002. Low Schooling for Girls, Slower Growth for All? World Bank Economic Review 16(3): 345-373. Behrman, Jere, Andrew D. Foster, Mark R. Rosenzweig, Prem Vashishtha. 1999. Women's Schooling, Home Teaching, and Economic Growth. Journal of Political Economy 107 (4): 682–719. Mammen, Kristin, and Christina Paxon. 2000. Women's Work and Economic Development. *Journal of Economic Perspectives* 14 (4): 141–64.
- Girls' education also leads to increased income for both individuals and nations as a whole. See Herz, Barbara and Gene Sperling. 2004. What works in girls' education: evidence and policies for the developing world. New York: *Council on Foreign Relations*. Psacharopoulos, George and Harry Anthony Patrinos. 2004. Returns to investment in education: a further update. *Education Economics* 12(2): 111-134.
- Subbarao, K., and Laura Raney. 1995. Social gains from female education. *Economic Development and Cultural Change* 44 (1): 105-28. Vandemoortele, J. and E. Delamonica. 2000. Education 'vaccine' against HIVAIDS.

Current Issues in Comparative Education 3(1). De Walque, Damien, J. S. Nakiyingi-Miiro, J. Busingye, and J. A. Whitworth. 2005. Changing Association between Schooling Levels and HIV-1 Infection Over 11 Years in a Rural Population Cohort in South-West Uganda. Tropical Medicine and International Health 10(10): 993-1001. Shuey, Dean, Bernadette B. Babishangire, Samuel Omiat and Henry Bagarukayo 1999. Increased sexual abstinence among in-school adolescents as a result of school health education in Soroti district, Uganda. Health Education Research 14(3): 411-419. Gage, Anastasia, Elisabeth Sommerfeldt, and Andrea Piani. 1997. Household structure and childhood immunization in Niger and Nigeria. Demography 34(2): 195-309. Schultz, T. Paul. 1993. "Returns to women's schooling," in Elizabeth King and M. Anne Hill, eds., Women's Education in Developing Countries: Barriers, Benefits, and Policy. Baltimore: Johns Hopkins Press. Smith, Lisa C., and Lawrence Haddad. 1999. Explaining child malnutrition in developing countries: a cross-country analysis. International Food Policy Research Institute (IFPRI) Food Consumption and Nutrition Division Discussion Paper 60. Washington, D.C.: IFPRI. Herz, Barbara and Gene Sperling. 2004. What works in girls' education: evidence and policies for the developing world. New York: Council on Foreign Relations. Heise, Lori, Mary Elsberg, and Megan Gottemoeller. 1999. Ending Violence against Women. Baltimore: Johns Hopkins University School of Public Health. Barro, Robert J. 1999. Determinants of Democracy. Journal of Political Economy107 (6): S158-83. Dollar, David, Raymond Fisman, and Roberta Gatti. 2001. Are women really the 'fairer' sex? Corruption and women in government. Journal of Economic Behavior and Organization 46(4): 423-429. Swamy, A., S. Knack, Y. Lee, and O. Azfar. 2001. Gender and corruption. Journal of Development Economics 64(1): 25-55. Lloyd, C. B., C. E. Kaufman, and P. Hewett. 2000. The Spread of Primary Schooling in Sub-Saharan Africa: Implications for Fertility Change. Population and Development Review 26 (3): 483-515.

- On the relationship between ecosystem services (e.g. food, fiber, shelter, water, and genetic diversity) and economic development, see Millennium Ecosystem Assessment, 2005. *Ecosystems and Human Well-Being: General Synthesis*. New York: Island Press. Balmford, A., Balmford A, Bruner A, Cooper P, Costanza R, Farber S, Green RE, Jenkins M, Jefferiss P, Jessamy V, Madden J, Munro K, Myers N, Naeem S, Paavola J, Rayment M, Rosendo S, Roughgarden J, Trumper K, Turner RK. 2002. Economic reasons for conserving wild nature. *Science* 297: 950-953; Kremen C, Niles JO, Dalton MG, Daily GC, Ehrlich PR, Fay JP, Grewal D, and Guillery RP. 2000. Economic incentives for rain forest conservation across scales. *Science* 288: 1828-1832.
- Rijsberman, F. 2003. Can development of water resources reduce poverty? *Water Policy* 5: 399-412. Hussain, I. and M.A. Hanrja. 2003. Does Irrigation water matter for rural poverty alleviation?: Evidence from South and South-East Asia. *Water Policy* 5:429-442. Millennium Ecosystem Assessment, 2005. *Ecosystems and Human Well-Being: General Synthesis*. New York: Island Press. Dobie, Philip. 2001. *Poverty and the Drylands*. Nairobi: United Nations Development Programme, Drylands Development Centre.
- A large body of empirical literature demonstrates a strong relationship between unsafe water and sanitation and lower levels of economic growth and poverty reduction. See Prüss-Üstün, A., D. Kay, L. Fewtrell, and

- J. Bartram. 2004. "Unsafe water, sanitation and hygiene" in *Comparative Quantification of Health Risks: Global and Regional Burden of Disease Attributable to Selected Major Risk Factors*, edited by M. Ezzati M, A. Lopez, et al. Geneva: World Health Organization. Markandya, Anil. 2005. "Water Quality Issues in Developing Countries" in *Essays in Environment and Development*, edited by Joseph Stiglitz. New York: Columbia University Press; Cole, A. and E. Neumayer. 2006. The impact of poor health on factor productivity: An empirical investigation. *Journal of Development Studies* 42(6): 918-938. Fay, M., D. Leipziger, Q. Wodon, and T. Yepes. 2005. Achieving Child-Health-Related Millennium Development Goals: The Role of Infrastructure. *World Development* 33(8): 1267–1284.
- Millennium Ecosystem Assessment, 2005. *Ecosystems and Human Well-Being: General Synthesis*. New York: Island Press. UN Millennium Project. 2005. *Environmental and Human Well-Being: A Practical Strategy*. London: Earthscan. USAID, CIFOR, Winrock International, WRI and IRG. 2002. *Nature, Wealth, and Power: Emerging Best Practice for Revitalizing Rural Africa*. Washington, D.C.: USAID.
- Smith, Kirk. 2006. "Women's Work: The Kitchen Kills More than the Sword," in *Women and gender equity in development theory and practice: institutions, resources, and mobilization*, edited by Jane S. Jaquette and Gale Summerfield. Durham, N.C.: Duke University Press. See Cosgrove, W. J., and F. R. Rijsberman. 1998. Creating a Vision for Water, Life and the Environment. *Water Policy* 1(1): 115. United Nations Development Program (UNDP). 2006. *Human Development Report* 2006. Basingstoke, Hampshire: Palgrave Macmillan.
- 42 Jalilian, Hossein, Colin Kirkpatrick, and David Parker. 2007. The Impact of Regulation on Economic Growth in Developing Countries: A Cross-Country Analysis. World Development 35(1): 87–103. Loayza, Norman, Ana Maria Oviedo, and Luis Serven. 2006. "The Impact of Regulation on Growth and Informality Cross-Country Evidence," in Linking the Formal and Informal Economy: Concepts and Policies, edited by Basudeb Guha-Khasnobis, Ravi Kanbur, and Elinor Ostrom. Oxford: Oxford University Press. World Bank. 2006. Doing Business 2007: How to Reform. Washington D.C.: World Bank. Djankov, Simeon, Caralee McLiesh, Rita Ramalho. 2006. Regulation and Growth. Economic Letters. 3: 395-401. Djankov, Simeon, Rafael La Porta, Florencio Lopez de Silanes, and Andrei Shleifer. 2002. Regulation of Entry. Quarterly Journal of Economics 117: 1-37. Friedman, Eric, Simon Johnson, Daniel Kaufmann, and Pablo Zoido-Lobaton. 2000. Dodging the Grabbing Hand: The Determinant of Unofficial Activity in 69 Countries. Journal of Public Economics 76: 459-493. Koedijk, Kees and Jeroen Kremers. 1996. Market Opening, Regulation and Growth in Europe. Economic Policy 23: 445-467. Heckman, James and Carmen Pagés. 2000. The Cost of Job Security Regulation: Evidence from Latin American Labor Markets. NBER Working Paper 7773. CEPR-IFS. 2003. The Link Between Product Market Reform and Macroeconomic Performance. Final report ECFIN-E/2002.002. Johnson, McMillan, and Woodruff. 2002. Property Rights and Finance. The American Economic Review 92(5). Ades, Alberto, and Rafael Di Tella. 1999. Rents, Competition, and Corruption. American Economic Review 89: 982-993. Johnson, Simon, Daniel Kaufmann, and Pablo Zoido-Lobaton. 1998. Regulatory Discretion and the Unofficial Economy. American Economic Review 88(2): 387-392. Dollar, David, Mary Hallward-Driemeier, and Taye Mary & Mengistae, Taye, 2006. Investment

climate and international integration. *World Development* 34(9): 1498-1516. Sala-i-Martin, X. 1997. I Just Ran 2 Million Regressions. *American Economic Review* 87(2): 178-83.

- Pg. 4 of Djankov, Simeon, Caralee McLiesh, Rita Ramalho. 2006. Regulation and Growth. *Economic Letters* 3: 395-401.
- Alesina, Alberto, Silvia Ardagna, Giuseppe Nicoletti, and Fabio Schiantarelli. 2005. Regulation and Investment. *Journal of the European Economic Association* 3: 791-825. Heckman, James and Carmen Pagés. 2000. The Cost of Job Security Regulation: Evidence from Latin American Labor Markets. *Economía* 2: 109–154. Johnson, Simon, Daniel Kaufmann, and Pablo Zoido-Lobaton. 1998. Regulatory Discretion and the Unofficial Economy. *American Economic Review* 88(2): 387-392. Ades, Alberto, and Rafael Di Tella. 1999. Rents, Competition, and Corruption. *American Economic Review* 89: 982-993. Ades, Alberto, and Rafael Di Tella. 1997. National Champions and Corruption: Some Unpleasant Interventionist Arithmetic. *The Economic Journal* 107:1023-1042. Fisman, Raymond, and Shang-Jin Wei. 2004. Tax Rates and Tax Evasion: Evidence from 'Missing Imports' in China. *Journal of Political Economy* 112(2): 471-496. Djankov, Simeon, Rafael La Porta, Florencio Lopez de Silanes, and Andrei Shleifer. 2002. Regulation of Entry. *Quarterly Journal of Economics* 117: 1-37. Larsson, Allan. 2006. Empowerment of the poor in informal employment. High Level Commission on Legal Empowerment of the Poor.
- Bruno, M., and W. Easterly. 1998. Inflation crises and long-run growth. *Journal of Monetary Economics* 41(1): 3-26. Bruno, M. and Easterly, W. 1996. Inflation and growth: in search of a stable relationship. *Federal Reserve Bank of St. Louis Review* 78(3): 139-146. Easterly, William. 2001. *The Elusive Quest for Growth*. Cambridge, MA: MIT Press. Barro, R. J. 1997. *Determinants of economic growth*. Cambridge, Mass.: MIT Press. Andres, J. and I. Hernando. 1999. "Does Inflation harm Economic Growth? Evidence from the OECD." in *The Costs and Benefits of Price Stability*, edited by M. Feldstein. Chicago: University of Chicago Press. Bolton, Daniel M. and Alexander, W. Robert J. 2001. The Differing Consequences of Low and High Rates of Inflation. *Applied Economics Letters* 8(6): 411-14. Fernandez Valdovinos, Carlos G. 2003. Inflation and Economic Growth in the Long Run. *Economics Letters* 80(2): 167-73.
- De Gregorio, Jose. 1993. Inflation, Taxation and Long-Run Growth. *Journal of Monetary Economics* 31: 271-98. Jones, L., R. E. Manuelli and P. E. Rossi. 1993. Optimal Taxation in Models of Endogenous Growth. *Journal of Political Economy* 101(3): 485-517. Feldstein, Martin. 1999. "Capital Income Taxes and the Benefit of Price Stability," in *The Costs and Benefits of Achieving Price Stability*, edited by M. Feldstein. Chicago: Chicago University Press. Fischer, Stanley, 1993. The Role of Macroeconomic Factors in Growth *Journal of Monetary Economics* 32(3): 485-512.
- Boyd, John, Ross Levine, and Bruce Smith. 2001. The Impact of Inflation on Financial Sector Performance. *Journal of Monetary Economics* 47: 221-48. Braun, M., and R. Di Tella. 2004. Inflation, Inflation Variability, and

Corruption. *Economics and Politics* 16(1): 77-100. Al-Marhubi, F. A. 2000. Corruption and Inflation. *Economics Letters* 66(2): 199-202.

- Easterly, W. and Stanley Fischer. 2001. Inflation and the Poor. *Journal of Money, Credit, and Banking* 1: 159-178. Datt, Gaurav and Martin Ravallion. 1998. Why Have Some Indian States Done Better Than Others at Reducing Rural Poverty? *Economica* 65: 17-38. Agenor, Pierre-Richard. 1999. "Stabilization Policies, Poverty, and the Labor Market," in *Poverty in sub-Saharan Africa*, edited by E. Thorbecke. Ithaca, NY: Cornell University Press. Romer, C. and Romer, D. 1999. "Monetary Policy and the Well-Being of the Poor." In *Income Inequality: Issues and Policy Options*. Kansas City: Federal Reserve Bank of Kansas City. Pg 159-201. Cardoso, Eliana. 1992. Inflation and Poverty. *NBER Working Paper* 4006. Powers, Elizabeth T. 1995. Inflation, Unemployment, and Poverty Revisited. *Economic Review* 3: 2-13. Li, Hongyi, and Heng-fu Zou. 2002. Inflation, Growth, and Income Distribution: A Cross-country Study. *Annals of Economics and Finance* 3(1): 85-101. Christiaensen, L., L. Demery, and S. Paternostro. 2003. Macro and Micro Perspectives of Growth and Poverty in Africa. *The World Bank Economic Review* 17: 317-334. World Bank. 2005. *Pro-Poor Growth in the 1990s: Lessons and Insights from 14 Countries*. Washington D.C.: World Bank. Lustig, Nora. 2000. Crises and the Poor: Socially Responsible Macroeconomics. *Economia* 1(1): 1-30.
- Fischer, Stanley. 1993. The Role of Macroeconomic Factors in Growth. *Journal of Monetary Economics* 32: 485-512. Easterly, W. and Rebelo, S. 1993. Fiscal Policy and Economic Growth: An Empirical Investigation. *Journal of Monetary Economics* 32(3): 417-458. Easterly, William. 2001. *The Elusive Quest for Growth*. Cambridge, MA: MIT Press.
- Ahlquist, J.S. 2006. Economic policy, institutions, and capital flows: portfolio and direct investment flows in developing countries. *International Studies Quarterly* 50(3): 681-704.
- Easterly, W. and Rebelo, S. 1993. Fiscal Policy and Economic Growth: An Empirical Investigation. *Journal of Monetary Economics* 32(3): 417-458. Ball, Laurence and N. Gregory Mankiw. 1995. "What Do Deficits Do?" in *Budget Deficits and Debt: Issues and Options*, Kansas City: Federal Reserve Bank of Kansas City, 95-119. Reinhart, C., Kenneth Rogoff and Miguel Savastano. 2003. Debt Intolerance. NBER Working Paper 9908.
- Pattillo, C., H. Poirson, and L.A. Ricci. 2003. Through What Channels Does External Debt Affects
 Growth? *Brookings Trade Forum*. Washington D.C.: Brookings Institution Press. pp. 229–58. Elbadawi, I. and K.
 Schmidt-Hebbel. 1998. Macroeconomic policies, instability and growth in the world. *Journal of African Economies*7: 116-168. Burnside, Craig, Martin Eichenbaum and Sergio Rebelo. 2001. Prospective Deficits and the Asian
 Currency Crisis. *Journal of Political Economy* 109(6): 1155-1197. Mussa, M. 2002. Argentina and the Fund: From
 Triumph to Tragedy. *Policy Analyses in International Economics* 67. Washington D.C.: International Institute for
 Economics. Cohen, D. 1993. Low Investment and Large LDC Debt in the 1980s. *American Economic Review* 52:
 437–49. Servén, L., 1997. Uncertainty, Unstability, and Irreversible Investment: Theory, Evidence, and Lessons from
 Africa. World Bank Policy Research Working Paper No. 1722.

- Christiaensen, L., L. Demery, and S. Paternostro. 2003. Macro and Micro Perspectives of Growth and Poverty in Africa. *The World Bank Economic Review* 17: 317-334. World Bank. 2005. *Pro-Poor Growth in the 1990s: Lessons and Insights from 14 Countries*. Washington D.C.: World Bank. Lustig, Nora. 2000. Crises and the Poor: Socially Responsible Macroeconomics. *Economía* 1(1): 1-30.
- World Bank. 2006. *Doing Business 2007: How to Reform*. Washington D.C.: World Bank. Djankov, Simeon, Rafael La Porta, Florencio Lopez de Silanes, and Andrei Shleifer. 2002. Regulation of Entry. *Quarterly Journal of Economics* 117: 1-37. De Soto, H. 1998. *The Other Path: The Invisible Revolution in the Third World*. New York: Harper Collins. De Soto, Hernando. 2000. The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else. New York: Basic Books. Klapper, Leora, Luc Laeven, and Raghuram Rajan. 2006. Entry regulation as a barrier to entrepreneurship. *Journal of Financial Economics* 82(3): 591-629.
- World Bank. 2005. Doing Business in 2005: Removing Obstacles to Growth. Washington D.C.: World 55 Bank. Djankov, Simeon, Rafael La Porta, Florencio Lopez de Silanes, and Andrei Shleifer. 2002. Regulation of Entry. Quarterly Journal of Economics 117: 1-37. Mauro, Paolo. 1995. Corruption and Growth. Quarterly Journal of Economics 110: 681-712. Baum, Matthew A., and David A. Lake. 2003. The Political Economy of Growth: Democracy and Human Capital. American Journal of Political Science 47(2): 333-347. Schneider, Friedrich and Dominik Enste. 2000. Shadow economies: Size, causes, and consequences. The Journal of Economic Literature 38(1): 77-114. Schneider, F., Enste D. 2002. The Shadow Economy: Theoretical Approaches, Empirical Studies, and Political Implications. Cambridge, UK: Cambridge University Press. Alesina, Alberto, Silvia Ardagna, Giuseppe Nicoletti, and Fabio Schiantarelli. 2005. Regulation and Investment. Journal of the European Economic Association 3: 791-825. Fonseca R., P. Lopez-Garcia and C.A. Pissarides. 2001. Entrepreneurship, Start-up Costs and Employment. European Economic Review 45: 692-705. Bertrand, Marianne, and Francis Kramarz. 2002. Does Entry Regulation Hinder Job Creation? Evidence from the French Retail Industry. Quarterly Journal of Economics 117(4): 1369-1414. According to the *Doing Business in 2005* report, "coupled with additional reforms, reductions in the cost of starting a business can yield even higher economic returns. A study by the World Bank shows that trade openness contributes about 0.4 percentage points annual economic growth in countries where labor markets are flexible and business start-up is easy. Why? Because trade enhances growth by channeling resources to their most productive uses in the economy. But if such resource movement is encumbered by high entry barriers, the effects of trade diminish and can even be reversed. This explains the negative effects of trade liberalization in some Latin American countries, where entry is difficult and labor markets inflexible."
- World Bank. 2005. *Doing Business in 2005: Removing Obstacles to Growth*. Washington D.C.: World Bank.
- World Bank. 2005. *Doing Business in 2005: Removing Obstacles to Growth*. Washington D.C.: World Bank.
- 58 De Soto, H. 1998. The Other Path: The Invisible Revolution in the Third World, New York: Harper Collins.

- World Bank. 2003. Land Policies for Growth and Poverty Reduction. Washington D.C.: World Bank. 59 Besley, Timothy. 1995. Property Rights and Investment Incentives: Theory and Evidence form Ghana. Journal of Political Economy 103(5): 905-93. Keefer, P., and S. Knack. 2002. Polarization, Politics, and Property Rights: Links between Inequality and Growth. Public Choice 111(1-2): 127-54.; De Soto, Hernando. 2000. The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else. New York: Basic Books.; Birdsall, N., and J. L. Londono. 1997. Asset Inequality Matters: An Assessment of the World Bank's Approach to Poverty Reduction. American Economic Review 87(2): 32-37. Acemoglu, D., S. Johnson, and J. Robinson. 2001. The Colonial Origins of Comparative Development: An Empirical Investigation. *American Economic Review* 91 (5): 1369-1401. Rodrik, Dani. 2000. Institutions for High-Quality Growth: What They Are and How to Acquire Them. Studies in Comparative International Development 35(3): 3-31.; Alden-Wily, L. 2002. Comments on the Legal Basis for Land Administration in an African Context. Paper presented at the World Bank Regional Land Policy Workshop, April 29-May 2, Kampala, Uganda. The empirical literature on secure land tenure also suggests a strong link to sustainable natural resource management. See A. Cattaneo, A. 2001. Deforestation in the Brazilian Amazon: Comparing the Impacts of Macroeconomic Shocks, Land Tenure, and Technological Change. Land Economics 77(2): 219-40. World Bank. 2003. Land Policies for Growth and Poverty Reduction. Washington D.C.: World Bank.) Crossnational empirical studies also demonstrate a strong relationship between rule of law—a close correlate of secure land tenure—and environmental protection. See Daniel Esty and Michael Porter. 2005. National environmental performance: an empirical analysis of policy results and determinants. Environment and Development Economics 10: 391-434; Robert T. Deacon. 1994. Deforestation and the Rule of Law in a Cross-Section of Countries. Land Economics 70: 414-430.
- Ravallion, M., and Datt, G. 2002. Why has economic growth been more pro-poor in some states of India than others? *Journal of Development Economics* 68 (2): 381-400. Christiaensen, L., L. Demery, and S. Paternostro. 2003. Macro and Micro Perspectives of Growth and Poverty in Africa. *The World Bank Economic Review* 17: 317-334. World Bank. 2003. *Land Policies for Growth and Poverty Reduction*. Washington D.C.: World Bank.
- World Bank. 2003. Land Policies for Growth and Poverty Reduction. Washington D.C.: World Bank. Adesina, A. A., and K. K. Djato. 1996. Farm Size, Relative Efficiency, and Agrarian Policy in Côte d'Ivoire: Profit Function Analysis of Rice Farms. Agricultural Economics 14(2): 93–102. Adesina, A. A., and K. K. Djato. 1997. Relative Efficiency of Women as Farm Managers: Profit Function Analysis in Côte d'Ivoire. Agricultural Economics 16(1): 47–53. Udry, C. 1996. Gender, Agricultural Production, and the Theory of the Household. Journal of Political Economy 104(5): 1010–46. Dolan, C. S. 2001. The 'Good Wife': Struggles over Resources in the Kenyan Horticultural Sector. Journal of Development Studies 37(3): 39–70. Quisumbing, A. R., and K. Otsuka. 2001. Land, Trees, and Women: Evolution of Land Tenure Institutions in Western Ghana and Sumatra. Research Report no. 121. International Food Policy Research Institute, Washington D.C. Deere, C. D., and M. Leon. 2001. Empowering Women: Land and Property Rights in Latin America. Pitt Latin America Series. Pittsburgh: University of Pittsburgh Press. Schultz, T. P. 1999. Women's Role in the Agricultural Household: Bargaining and Human Capital. Discussion

Paper no. 803. Yale University, Economic Growth Center, New Haven, Connecticut. Strickland, Richard. 2004. To Have and To Hold: Women's Property and Inheritance Rights in the Context of HIV/AIDS in Sub-Saharan Africa. ICRW Working P

- 62 Sachs, Jeffrey, and Andrew Warner. 1995. Economic Reform and the Process of Global Integration. Brookings Papers on Economic Activity 1: 1-118. Dollar, David. 1992. Outward-Oriented Developing Economies Really Do Grow More Rapidly: Evidence from 95 LDCs, 1976-85. Economic Development and Cultural Change 523-544. Frankel, Jeffrey, and David Romer. 1999. Does Trade Cause Growth? American Economic Review 89(3): 379-399. Hall, R. and C. Jones. 1999. Why Do Some Countries Produce So Much More Output Per Worker Than Others? *Quarterly Journal of Economics* 114 (1): 83-116, 1999. Wacziarg, Romain. 1998. Measuring the Dynamic Gains from Trade. World Bank Working Paper no. 2001. Washington D.C.: World Bank. Wacziarg, R. T. and Karen Horn Welch. 2003. Trade Liberalization and Growth: New Evidence. NBER Working Paper 10152. Frankel, J.A. and Eduardo A. Cavallo. 2004. Does Openness to Trade Make Countries More Vulnerable to Sudden Stops, Or Less? Using Gravity to Establish Causality. NBER Working Paper 10957. Paul M. Romer. 1994. New Goods, Old Theory, and the Welfare Costs of Trade Restrictions. NBER Working Paper. Jonnson, G. and Arvind Subramanian. 1999. Dynamic Gains from Trade: Evidence from South Africa. International Monetary Fund Working Paper WP/00/45. Dollar, David and Aart Kraay. 2004. Trade, Growth, and Poverty. Economic Journal 114(493): 22-49. Arvind Panagariya, 2004. Miracles and Debacles: In Defense of Trade Openness. The World Economy 27(8): 1149-1171. Alcala, Francisco, and Antonio Ciccone. 2004. Trade and Productivity. Quarterly Journal of Economics 119(2): 613-646. Lee, H.Y., L.A. Ricci, and R. Rigobon. 2004. Once Again, is Openness Good for Growth? Journal of Development Economics 75(2): 451-72. Dollar, David and Aart Kraay. 2002. Institutions, Trade, and Growth. Journal of Monetary Economics 50:133-162. Sachs, Jeffrey D. and Warner, Andrew M. 1997. Sources of slow growth in African economies. Journal of African Economies 6(3): 335-76. Salinas, Gonzalo, and Ataman Aksoy. 2006. Growth before and after trade liberalization. World Bank Policy Research Working Paper 4062. Washington D.C.: World Bank. Doppelhofer, G., R. Miller and X. Sala-i-Martin. 2004. Determinants of Long-Term Growth: A Bayesian Averaging of Classical Estimates Approach. American Economic Review 94(4): 813-835.
- Bottasso, Anna, and Alessandro Sembenelli. 2001. Market Power, Productivity and the EU Single Market Program: Evidence from a Panel of Italian Firms. *European Economic Review* 45(1): 167-186. Levinsohn, James A. 1993. Testing the Imports-as-Market-Discipline Hypothesis. *Journal of International Economics* 35(1-2): 1-22. Fisman, Ades, Alberto, and Rafael Di Tella. 1997. National Champions and Corruption: Some Unpleasant Interventionist Arithmetic. *The Economic Journal* 107: 1023-1042. Ades, Alberto, and Rafael Di Tella, 1999. Rent, Competition, and Corruption. *American Economic Review* 89(4): 982–93. Treisman, D. 2000. The Causes of Corruption: A Cross-National Study. *Journal of Public Economics* 76: 399-457. Gerring, J. and S. Thacker. 2005. Do Neoliberal Policies Deter Political Corruption? *International Organization* 59(1): 233–254. Sandholtz, Wayne and William Koetlze. 2000. Accounting for Corruption: Economic Structure, Democracy, and Trade. *International*

Studies Quarterly 44 (1): 31-50. World Bank. 2006. Doing Business 2007: How to Reform. Washington D.C.: World Bank.

- 64 Sachs, Jeffrey, and Andrew Warner. 1995. Economic Reform and the Process of Global Integration. Brookings Papers on Economic Activity 1: 1-118.
- Bannister, Geoffery J. and Kamau Thugge. May 2001. International Trade and Poverty Alleviation. IMF working paper WP/01/54. Christiaensen, L., L. Demery, and S. Paternostro. 2003. Macro and Micro Perspectives of Growth and Poverty in Africa. *The World Bank Economic Review* 17: 317-334. Berg, A. and Anne Krueger. 2003. Trade, Growth and Poverty: A Selective Survey. International Monetary Fund Working Paper WP/03/30. Kraay, Aart, and David Dollar. 2004. Trade, Growth, and Poverty. *The Economic Journal* 114 (493): F22-F49. Winters, A., N. McCulloch, and A. McKay .2004. Trade Liberalization and Poverty: The Evidence So Far. *Journal of Economic Literature* XLII: 72-115.