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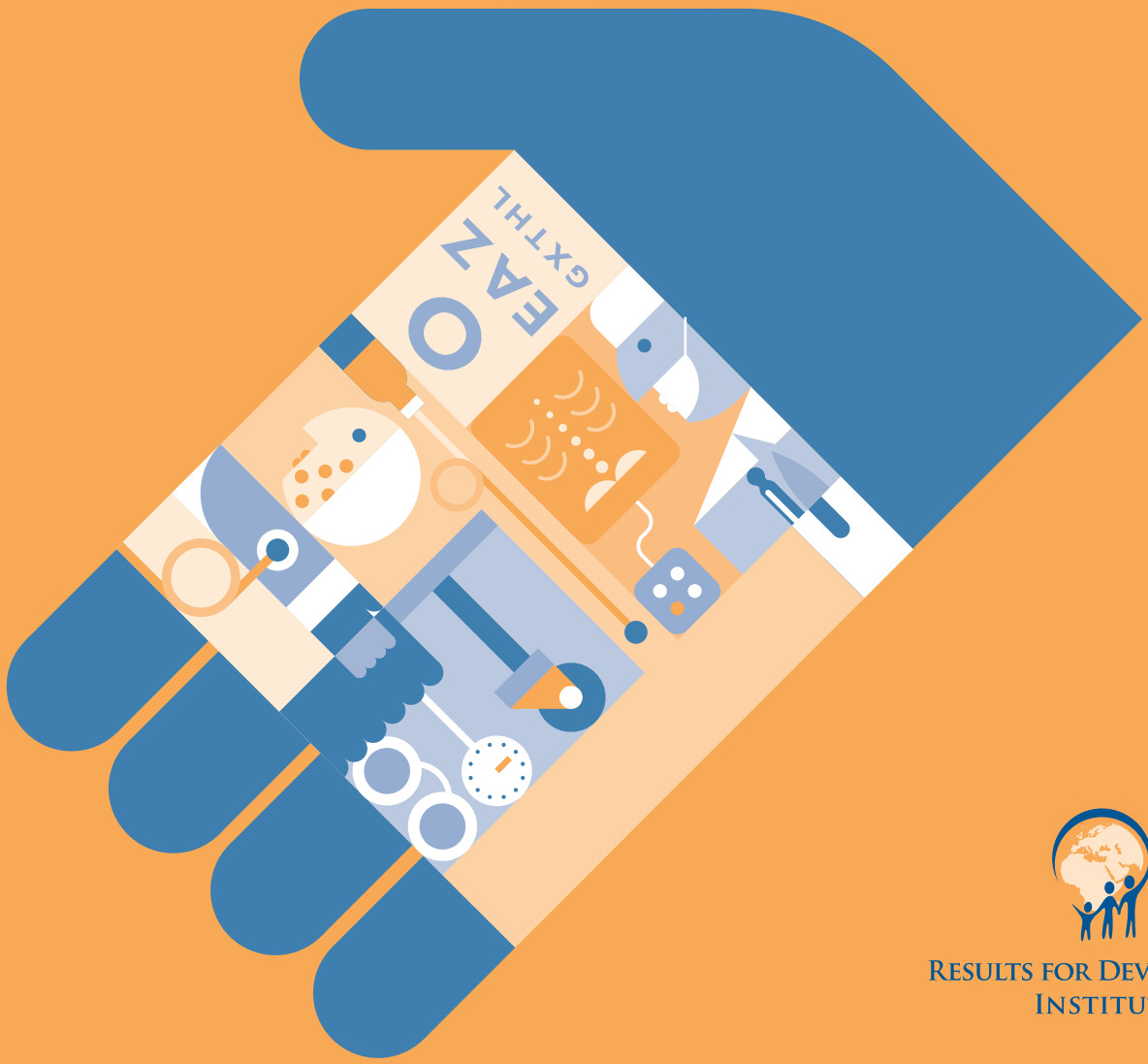
Regulation of Health Service Delivery in Private Sector: Challenges and Opportunities

V. Tangcharoensathien
S. Limwattananon
W. Patcharanarumol
C. Vasavid
P. Prakongsai
S. Pongutta

International Health Policy Program, Thailand



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Regulation of Health Service Delivery in the Private Sector:

Challenges and Opportunities

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Viroj Tangcharoensathien

Supon Limwattananon

Walaiporn Patcharanarumol

Chitpranee Vasavid

Phusit Prakongsai

Suladda Pongutta

International Health Policy Program -Thailand

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Abstract

Evidence indicates that the private health sector plays a substantial role, especially in developing countries, and that the private health sector is heavily used by the poor, in an unregulated environment. Based on reviews of international peer-reviewed papers and gray literature and an additional secondary data analysis, this paper reviews and provides an understanding of the private health sector's role in low- and middle-income countries and its relationship with the governmental capacity to regulate private providers, in particular, and to act as health system steward, in general.

Findings indicate a positive correlation between country income and government capacity in most of the World Bank's Worldwide Governance Indicators and a negative relationship between private health expenditure and government capacity to regulate.

The study concludes that regulations through the government's "direct command and control"—for example, through registration and licensing of professionals and medical facilities—are necessary but inadequate to reorient the private sector's contribution toward achieving the goals of efficiency, affordability, and equity of health care. The risks of government capacity to regulate are "policy capture" due to conflict of interest and corruption, administrative constraints, and insufficient information to furnish evidence for regulation.

Additional mechanisms contributing to better regulation are required, such as self-regulation by professional associations for qualifications and entry to market and hospital accreditation programs, especially by linking the quality of care to incentive conditions in service contracts by purchasing agencies. However, social health insurance and other pre-paid financing mechanisms and insurance are poorly developed in most low- and middle-income countries, where competitive contracting can be a powerful instrument for regulating both the public and private sectors. Civil society plays a crucial role in enabling consumer voices to be heard and in serving as a watchdog.

1. Background

Use of private health care

Households in low- and middle-income countries often seek care through private providers. The private (or non-state) health sector includes all actors outside the government, such as for-profit, nonprofit, formal, and informal entities (Hanson and Berman 1998). In Sub-Saharan Africa, the majority of malaria episodes were initially treated by private providers, mainly through the purchase of drugs from shops and peddlers (McCombie 1996; Hanson et al. 2000). In Vietnam, the private sector accounted for about 60 percent of all outpatient visits (Ha, Berman, and Larsen 2002). Among children who had diarrhea, more than 50 percent in Nepal (Kafle et al. 1992) and more than 90 percent in India (Rohde 1997) sought care outside the public sector. Similarly, a large proportion of children affected by the common acute illnesses (diarrhea and acute respiratory tract infection) in Egypt (Waters, Hatt, and Axelsson 2002) and in Bolivia, Guatemala, and Paraguay (Berman et al. 1996) received care from various types of private providers.

Even for the poor, the private health sector plays a dominant role in care giving. Previous reports based on analyses of Demographic and Health Survey data from developing countries revealed that 34–96 percent of children in the 20 percent poorest households seeking care for diarrhea and 37–99 percent of children in those households seeking care for acute respiratory tract infection received treatment in the non-state sector, mostly from private pharmacies, street drug vendors or drug peddlers, and traditional healers (Gwatkin et al. 2000; Bustreo, Harding, and Axelsson 2003).

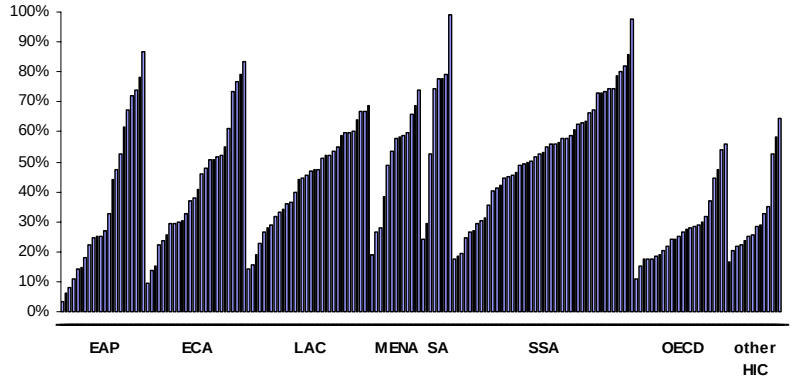
Policymakers in low- and middle-income countries cannot deny the existence and role of the non-state sector.

Private health spending

Not only is substantial service provided by the private health sector, national health accounts confirm a consistent pattern in the private sector's share of spending on health care across world regions[1] (figures 1A and 1B for 2000 and 2004, respectively). In most developing countries, spending on health care services in the private sector consists of direct out-of-pocket payment from households (at the point of health service), while in high-income and other countries, people pay prospectively through health insurance pools so as to avoid the financial risk posed by uncertainty of illnesses, which results in better protection among a large pool of insurance members.

[1] Based on the World Bank's classification of world regions, low- and middle-income countries are in East Asia and the Pacific, Europe and Central Asia, Latin America and the Caribbean, Middle East and Northern Africa, South Asia, and Sub-Saharan Africa. High-income countries in any region are the members of the Organisation for Economic Co-operation and Development (OECD) and other high-income countries.

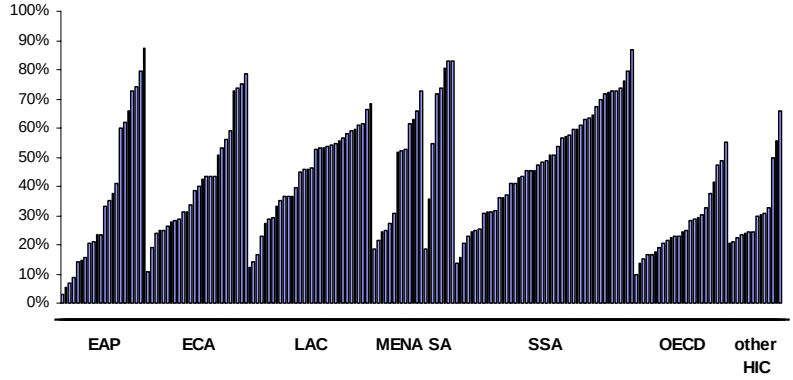
Figure 1A: Private sector share of health expenditure in each country by region, 2000



Note: EAP –East Asia and Pacific, ECA –Eastern Europe and Central Asia, LAC – Latin America and the Caribbean, MENA –Middle East and Northern Africa, SA –South Asia, SSA – sub-Saharan Africa, OECD –Organization for Economic Cooperation and Development, HIC –high income countries.

Source: Author's analysis based on World Health Statistics (WHO 2007).

Figure 1B: Private sector share of health expenditure in each country by region, 2004

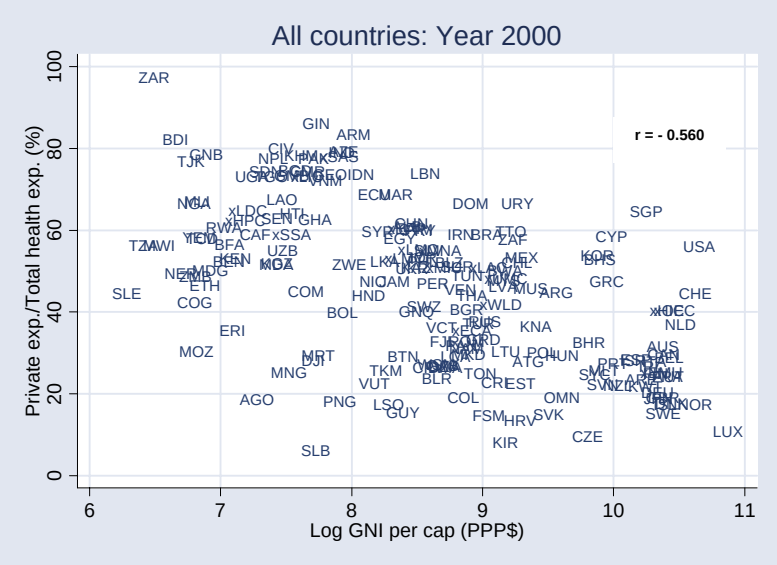


Note: EAP –East Asia and Pacific, ECA –Eastern Europe and Central Asia, LAC – Latin America and the Caribbean, MENA –Middle East and Northern Africa, SA –South Asia, SSA – sub-Saharan Africa, OECD –Organization for Economic Cooperation and Development, HIC –high income countries.

Source: Author's analysis based on World Health Statistics (WHO 2007).

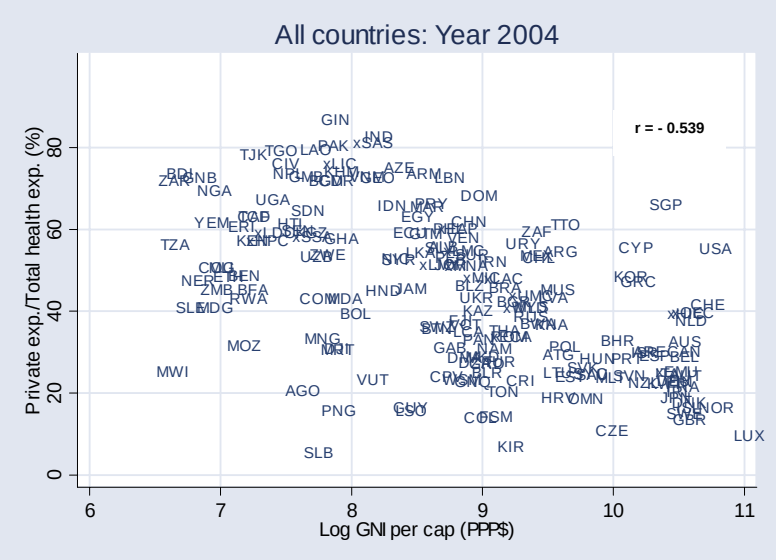
As national income per capita increases, the private sector's share of health care spending seems to decrease. Figures 2A and 2B show a reverse relationship between gross national income per capita and the share of private health expenditure across countries (the correlation coefficient is $r = -0.560$ and -0.539 for 2000 and 2004, respectively). Singapore and the United States stand out consistently as the high-income countries where private spending accounts for more than half of total health expenditures, while the Solomon Islands, Papua New Guinea, Angola, Mozambique, Malawi are examples of low-income countries where private spending plays a minor role.

Figure 2A: Private share of health expenditure and gross national income per capita, 2000



Source: Author's analysis based on World Health Statistics (WHO 2007) and HNP Stats (World Bank 2007).

Figure 2B: Private share of health expenditure and gross national income per capita, 2004



Source: Author's analysis based on World Health Statistics (WHO 2007) and HNP Stats (World Bank 2007).

The World Health Organization's Working Group on the Non-State Sector has identified the most important challenges in public-private collaboration in two areas, which are directly related to the public health goals: (1) to expand coverage of products and services known to have a public health benefit; and (2) to promote a

higher quality of care provided by the private sector, at a minimum to protect the health of patients and broader society (Bennett et al. 2005).

The rationale for regulation

The health care market often does not function well, unlike markets for other private goods and services, which function perfectly. There are several limitations in the health care market that lead to market failure.

For example, most patients rely solely on health care providers' decisions when they choose health care services (a phenomenon known as the principal-agent relationship). Because of the asymmetry of knowledge between the two parties (namely, the providers have better health information than the patients), the providers may act under a conflict of interest and inappropriately create supplier-induced demand for health care. When immunization services have positive social externalities (e.g., herd immunity), users are not willing to pay and want a "free ride."

Private sector involvement in health activities is a major concern given the issues of poor-quality drug products and unqualified health practitioners. Misuse of public resources, overuse of high technology (especially by the urban rich population), and the promotion of hotel aspects of health care by the private sector can lead to an escalation of total health care costs and overall health system inefficiency. In addition, inequality of access to essential care and health insurance has been reported as private sector activities have expanded (Hsiao 1995).

These problems are even more complicated in the resource-poor settings characteristic of low-income countries. Concerns about health care quality have been found in various practices:

- drug prescribing, dispensing, and utilization behaviors—for example, unnecessary use of antibiotics for the treatment of diarrhea and non-complicated acute respiratory tract infections in Egypt (Langsten and Hill 1995) and Pakistan (Siddiqi et al. 2002)
- insufficient use of oral rehydration salts for the treatment of dehydration in Nigeria (Igun 1994), in Pakistan (Siddiqi et al. 2002), and in Bangladesh, Sri Lanka, and Yemen (Tomson and Sterky 1986)
- under-dosing of anti-malarial medicines in Vietnam (Cong et al. 1998)

Others have reported problems with over-the-counter sales of anti-retrovirals in Vietnam; inconsistent and non-standardized prescribing of anti-retrovirals in Senegal and Zimbabwe; and non-adherence to TB treatment guidelines in India (Laing, Hogerzeil, and Ross-Degnan 2001). Even for the licensed health professions, misuse of privileges, medical malpractice, and medical negligence have been found among private doctors in India in order to maximize income (Yesudian 1994; Bhat 1999).

The 1993 *World Development Report*, which promotes the private delivery of health services, addresses a crucial need for strengthening capacity of governments to regulate the private sector to ensure that quality of care is met, that fraud and abuse do not occur, and that those entitled to care have access to services (World Bank 1993). The problems associated with the privatization of health care delivery would result in

an increasing role for the government in monitoring and regulating the health service system (Muschell 1995). It warrants the government to bear responsibility for the achievement of both economic and social justice policy objectives of regulatory activities (Saltman, Busse, and Mossialos 2002).

2. Objective and Methodology

This study is an initial program scan conducted to understand the global issues of the private health care sector and the country challenges and opportunities with respect to health regulation.

The main method employed is a review of both published and gray literatures. Additional secondary data analysis was conducted to identify possible relationships between private sector activities and public health systems or other socioeconomic contexts. The data sets used in the study are the World Bank's World Development Indicators and Worldwide Governance Indicators, and Transparency International's Corruption Perceptions Index. The health- and regulation-related data are presented in a time-series format and mostly available for the years 2000–2004 (for health expenditures) and for the year 2006 (for governance). Time trends or changes in country contexts are also explored.

This scan focuses on the regulation of health service deliveries with respect to health facilities, health practitioners, and pharmaceuticals. A general framework of related terms, such as "stewardship," "governance," and "accountability," is introduced to shed light on the broader context of regulation in a country. Successes and failures in the experiences of developing countries in health regulation are presented as examples of challenges and opportunities. Socioeconomic and political profiles of 13 selected countries whose regulatory experiences and challenges are discussed in this paper are presented in the appendix.

3. Regulatory Command-and-Control Measures

The command-and-control type of regulation is a government's way of controlling the distribution of health products and services in a country. Regulatory controls can be established through each of three branches of government: as legislation (legislative branch), as an administrative decree (executive branch), or as a judicial order (judicial branch).[2]

The two orientations of regulation—to achieve deterrence and to achieve compliance—are usually accomplished by command-and-control measures imposed

[2] In a democratic political system, regulatory measures promulgated by the executive branch can be challenged in court, often on the grounds that they exceed legal authority or violate other laws, and can be overruled by judicial order.

by a government. However, success in regulation will depend largely on the following characteristics of the regulatory body:

- Technical capacity to perform basic regulatory functions, including setting standards, informing, enforcing, monitoring performance, and conducting legislative review
- Ability to process information responsively
- Ability to work with other components of the public sector and with other actors
- Political commitment to performing regulatory responsibilities (Afifi, Busse, and Harding 2003)

In general, regulatory control in the health care market is aimed at controlling distribution or market entry, price, and quality of products and services. The direct regulation of price—for example, price setting for health care providers—is uncommon in low- and middle-income countries, largely due to a lack of reliable information on private sector costs to determine the appropriate formula. The most common one is the control of quantity and quality.

With regard to the three stages of health service delivery—inputs, production process, and outputs—regulatory control of quality usually focuses on control of the first two stages. Health regulation in countries like Zimbabwe and Tanzania largely deals with controlling health service structures or inputs (health facilities and practitioners), rather than ensuring the quality of process and outputs (Hongoro and Kumaranayake 2000; Kumaranayake et al. 2000).

It has been suggested that there is a need in low- and middle-income countries for at least basic regulatory control over the market entry of health care providers. This is to ensure that a minimum standard requirement is established before providers begin offering health care services.

Country experiences with regulatory control

A review by Bennett and colleagues (1994) revealed that all developed countries and most developing countries have some forms of basic regulatory controls over health care providers, restrictions against dangerous or unethical health services, and legislation on the production and distribution of drugs. Low- and middle-income countries tend to have less legislation on health facilities than on health practitioners, and the regulatory requirement is in less demand than in the high-income countries.

Regarding regulatory instruments, licensing or registration of health care providers is one of the common input-oriented regulatory controls (Afifi, Busse, and Harding 2003). Because of the wide extent of the private sector and limited resources in government regulatory agencies, enforcement of law and regulations against non-compliant health care providers is usually weak (Matsebula, Goudge, and Gilson 2005). In Andhra Pradesh of India, where the majority of medical pregnancy terminations are carried out in the private sector, inspections of the nationally licensed facilities are not maintained, and service records are fragmented (Ensor and Dey 2003).

Even if legislative measures exist in most low- and middle-income countries, enforcement and its effectiveness has been weak (Asiimwe and Lule 1993; Mujinja Urassa, and Mnyika 1993; Yesudian 1994). The Working Group on the Non-State Sector concluded that health regulation in developing countries remains unimplemented or weakly implemented because regulatory capacity is lacking or because it is perverted by powerful vested interests (Bennett et al. 2005). Strategy should focus on discrete high-priority issues including core regulatory functions (such as licensing and registration, consumer protection) and be backed up by the strengthening of appropriate regulatory capacity.

Pharmaceuticals in Laos, Thailand, Vietnam, Pakistan, and Nigeria

When poor households seek care from private providers, they often turn to pharmacies, drug sellers, and traditional healers. Two papers, one on Laos and the other on Thailand and Vietnam, provided randomized controlled trial evidence of regulation effectiveness on the quality of private pharmacies. They suggested successful regulation is more likely if the government employs a multi-faceted strategy. In Savannakhet province of Laos, regulatory interventions involved intensive inspections of each pharmacy (four times a year), enforcement of sanctions when rules were violated, dissemination of up-to-date regulatory documents, and provision of information during inspections about particular points needing improvement (Stenson, Syhakhang, and Lundborg 2001). The statistically significant, moderate improvements (increases in availability of essential dispensing materials, orders in the pharmacy, information given to customers, and reduction in the mixing of different drugs in the same package) were observed in the inspected districts (46 pharmacies). The authors claimed that the strategy could be replicated in other low-income countries given the low-cost of the interventions.

In Bangkok, the capital city of Thailand (78 pharmacies), and Hanoi, the capital of Vietnam (68 pharmacies), the interventions included local inspector visits to each pharmacy, and large-group and face-to-face education (in Bangkok), and voluntary and compulsory peer reviews (in Hanoi) (Chalker et al. 2005). These comprehensive regulatory interventions resulted in significant improvements for Bangkok in one tracer (reduced dispensing of illegal steroids), and for Hanoi in all tracers (sustainable reduction in dispensing of illegal steroids and inadequate dose of antibiotics, and fewer dispensers asking no questions and giving no advice).

Sometimes, a very rigid regulatory control of the private sector may unexpectedly result in perverse outcomes. In Pakistan, withdrawal of pediatric anti-motility drugs for diarrhea, following the product's deregistration, led to substitution of more dangerous, adult formulations (Bhutta and Balchin 1996). When the private sector is highly competitive, as in the ambulatory care market, medical practice that meets the perceived needs of patients is important for the economic survival of the providers.

In Nigeria, the National Agency for Food and Drug Administration and Control (NAFDAC) has been at the forefront of efforts to fight counterfeit drugs[3] in West

[3] NAFDAC defines counterfeit drugs as drugs that contain no active ingredients; herbal preparations that are toxic, ineffective, or mixed with orthodox medicine; expired drugs that have been relabeled; drugs issued without publishing the full name and address of the manufacturer;, or drugs not registered by NAFDAC.

Africa. Substandard and counterfeit drugs have appeared in Nigeria due to a lack of regulation and monitoring after the distribution of drugs was denationalized in 1968. In one of the most corrupt countries in the world, some NAFDAC staff abused their positions by taking bribes from the counterfeiters in return for access to the drug market. In 1995, Nigeria reportedly donated 88,000 doses of meningitis vaccine, which was later found to be fake, to Niger. A study in 2001 found 68 percent of the drugs in Nigeria were not registered with NAFDAC (Ijeoma et al. 2001).

Under the leadership of Dora Akunyili[4] since 2001, most of the corrupt NAFDAC officers have been fired, and the morale of the remaining 3,000 staff has been boosted by incentives, such as training abroad, improved facilities, and a better working environment. The agency inspects shops and markets, conducts tough surveillance at ports of entry, and uses mass media (newspapers, radio, and television) to raise public awareness of the dangers of counterfeit drugs and to encourage tip-offs from the public.

NAFDAC establishes new guidelines on drug sampling and disseminates the guidelines to the drug industry. The guidelines prohibit NAFDAC staff from accepting free transportation, lunch, or gifts from the facilities they inspect. Even though drug regulation in Nigeria is not always enforced properly and stronger penalties in amended legislation have not been successful (Raufu 2006), a study in 2004 revealed an 80 percent decrease in counterfeit drugs. NAFDAC's dual strategy of creating a strong regulatory environment while encouraging intolerance of the problems through public education campaigns seems to be working. At the international level, after fighting the global problem of drug counterfeiting for almost 20 years, the World Health Organization established the International Medical Products Anti-Counterfeiting Taskforce (IMPACT) in November 2006 (Burns 2006).

Medical practice in India and Malawi

India's experience with developing regulations for the private health sector and enforcing them has been extensively reviewed in relation to three particular laws: the Consumer Protection Act, the Medical Council Act, and the Nursing Home Act (Bhat 1996).

The study found that most private doctors in India were aware of the main objectives of the Consumer Protection Act and the Medical Council Act. A small fraction of the respondents believed that these laws were not effective in protecting patient interests.

The 1986 Consumer Protection Act, which is applicable universally across all states, has established consumer protection councils at the district, state, and national levels to address the complaints of aggrieved consumers. The act does not include medical services in its list of specified services. Health services provided free of charge and those provided under a contract for personal services are exempted. Private doctors and medical associations have argued that a service provided by a medical practitioner is a personal contract and, hence, was excluded from the Consumer Protection Act

[4] Her five-year mandate expired in April 2006. She was the winner of Transparency International's Integrity Award in 2003 and has survived an assassination attempt.

and that conflict cases should be tried under the Medical Council Act. The Indian Supreme Court ruled that the act is applicable to any paid medical service.

The Medical Council Act, passed in 1956, aimed to reconstitute the 1916 Medical Degrees Act in controlling non-uniformity of the medical education offered by various colleges in India by granting more powers to the Medical Council of India as the national regulatory body, in addition to various existing state medical councils. However, it was found that the medical councils as regulators have failed to regulate the medical profession and to set adequate standards to safeguard patients' interests.

Nursing homes in India are small private hospitals and dispensaries that provide both inpatient and outpatient services. They have experienced rapid growth without regulation except in two states, Maharashtra and Delhi, which have state nursing home acts that require registration of new facilities and an annual renewal of the registration. However, it was found that the majority of nursing homes in the two states were opened without registration and that facilities were rarely inspected.

In Malawi, the 1989 statute that allowed health professionals to enter private practice laid down basic standards for health facilities and drugs that private practitioners were able to sell. Under a monitoring system, the Medical Council has conducted initial inspections in connection with applications to open private practices. A survey reported that 73 percent of private practices have no refrigerators and that a wide variety of the drugs dispensed were not on the approved list (Ngalande-Banda and Walt 1995).

Challenges to regulatory controls

Major constraints in the command-and-control type of health regulation can be divided into three categories:

1. Political constraints and regulatory capture. Regulatory (or policy) capture, which refers to inappropriate influence on the regulatory body by interest groups, can be a problem of command-and-control regulation (Ngalande-Banda and Walt 1995; Soderlund and Tangcharoensathien 2000). Corruption in the regulatory body is a common phenomenon in developing countries. (This issue is discussed separately below.)

2. Administrative constraints. In resource-poor settings like low-income countries, monitoring the private sector's compliance with rules and regulations and enforcing them against non-compliant actors are often inadequately funded (Brugha and Zwi 1998; Birungi et al. 2001; Yesudian 1994; Hongoro et al. 2000; Bhat 1999; Ibrahim and Isani 1997). Even in countries with adequate resources, the administrative costs of the monitoring system may be prohibitively high. For example, transaction costs in the regulated private health insurance market in the United States and Chile are as much as 25 percent and 30 percent of premium revenues, respectively (Hsiao 1995).

3. Informational constraints. Information on the private sector is important for governmental regulatory controls in two respects: To improve an existing regulation, the government first needs to collect information about the role and activities performed by private providers. Patterns of health service provision need to be

tracked because this information helps identify quality issues in the private sector. Second, an ongoing analysis of the collected information is key to a good monitoring system. This is to ensure compliance with the rules set by the regulation. In developing countries, reliable and timely data needed for regulatory controls are mostly unavailable or limited, especially those from facility-based routine reports. The Demographic and Health Survey is one of just a few surveys that track the patterns of health service utilization in developing countries through household samplings.

4. Government Stewardship and Governance

Successful engagement of the private sector in health system development requires a broader context beyond regulatory commands and controls. To accomplish health system performance goals, the government must play an active role in system stewardship. Government stewardship places an emphasis on the oversight role of the state in monitoring, shaping, regulating, and managing health systems. As such, the government has a fundamental responsibility to set the rules of engagement for all actors in the public and private sectors. It must provide the private actors with overall policy direction, define clear roles and responsibilities, and help develop a predictable and transparent environment within which the private sector can operate. It also needs to realign government functions to be steered toward serving the public health interest.

The *World Health Report 2000* placed a special emphasis on the enabling stewardship function, which has a profound influence on the other three roles (service provision, resource generation, and financing) to achieve the three objectives (good population health, responsiveness to people's expectation, and fairness of financial contribution) of a desirable health system (WHO 2000).

Since 1996, the World Bank has taken a keen interest in developing a measure of country governance called the Worldwide Governance Indicators out of a growing recognition of the link between good governance and successful development. In this sense, governance is operationally defined as the set of traditions and institutions by which authority is exercised in a country (World Bank 2007a). The Worldwide Governance Indicators score is calculated from an aggregate measure of six dimensions of country performance in governance: (1) voice and accountability, (2) political stability and absence of violence, (3) government effectiveness, (4) regulatory quality, (5) rule of law, and (6) control of corruption.

The scores have been arranged in a Z-standardized distribution pool of raw rating scales (how far the raw score of each country is from the mean as a ratio to the standard deviation) from 33 expert sources (for example, commercial businesses, the public, and nongovernmental organizations) and surveys. A country with good governance has a score that is close to 2.5, while a country with poor governance has a score that is close to –2.5 (hence, the mean is a score of 0).

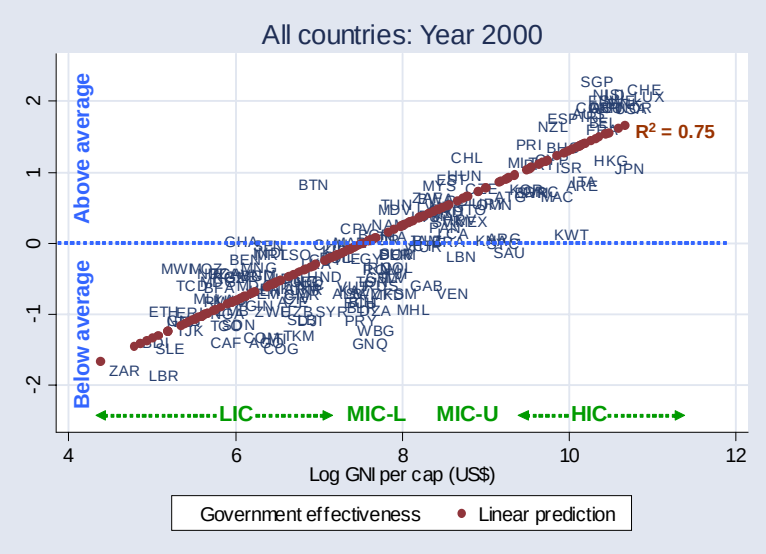
Government effectiveness

Countries vary widely in the performance of their governments in terms of governance quality. Government effectiveness, one of the six Worldwide Governance Indicator dimensions, is defined as "the quality of public services, the quality of civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies."

Country-level analyses have revealed a significant link between population health outcomes[5] and health expenditure (Filmer and Pritchett 1999; Wagstaff 2002; Bokhari, Gai, and Gottret 2007). However, this two-variable association appears to be affected by a third variable—the performance of the country's government. In countries where governance is relatively poor, the wealth-health relationship is weak in contrast to the wealth-health relationship in countries where governance is good (Rajkumar and Swaroop 2002; Wagstaff 2004).

Interestingly, a country's wealth is correlated positively with its governance performance. Figures 3A and 3B show the linear link between gross national income per capita (in logarithmic scale of current year U.S. dollars, on the horizontal axis) and the government effectiveness (ranging from –2.5 to +2.5, on the vertical axis) as represented by a straight line, in 2000 and 2006 respectively. Country income alone can predict approximately 70 percent of the variation in government effectiveness across all countries (R^2 = 0.75 and 0.72 for 2000 and 2006, respectively).

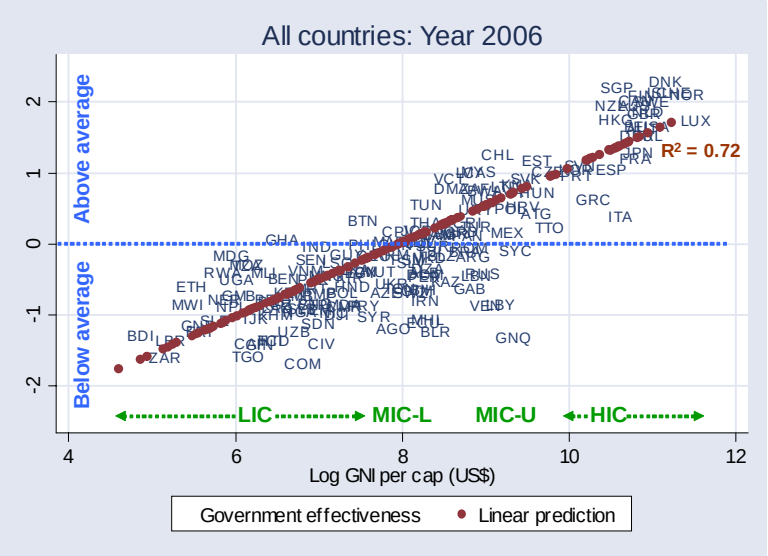
Figure 3A: Per capita gross national income and government effectiveness, 2000



Source: Author's analysis based on the World Bank's World Development Indicators and Worldwide Governance Indicators.

[5] As measured by the under-five mortality rate, infant mortality rate, or maternal mortality ratio.

Figure 3B: Per capita gross national income and government effectiveness, 2006



Source: Author's analysis based on the World Bank's World Development Indicators and Worldwide Governance Indicators.

Government effectiveness in terms of the quality public services and the government's commitment is likely a result of the country's institutional capacity. Obviously, high-income countries are in a better position to invest in human resources and social capital.

Nearly all low-income countries performed more poorly in government effectiveness than the average for all countries (below average Worldwide Governance Indicators < 0). For example, Ghana ranked 80th in 2000 and 84th in 2006 in terms of its observed governance scores. However, Ghana is among the top three low-income countries whose performance in government effectiveness in both 2000 and 2006 is better than that of other low-income countries with a comparable income level. Other top three performers among low-income countries are Mozambique and Bhutan in 2000; and Ethiopia and Madagascar in 2006 (table 1). These countries are candidates for good governance based on the government effectiveness dimension.

Table 1: Top three low-income countries with higher than predicted governance for their income levels

Worldwide Governance Indicator	2000		2006	
	Country	Ranking	Country	Ranking
Governance effectiveness	Bhutan	39	Ethiopia	135
	Ghana	80	Ghana	84
	Mozambique	106	Madagascar	99
Regulatory quality	Burkina Faso	95	Gambia	118
	Ghana	86	Ghana	95
	Malawi	112	Madagascar	111
Rule of law	Eritrea	109	Bhutan	58
	Gambia	91	Gambia	101
	Ghana	86	India	81

Source: Author's analysis based on the World Bank's Worldwide Governance Indicators.

In contrast, some low-income countries performed badly in government effectiveness on not only the observed value but also when compared with other low-income countries that have a similar income (table 2).

Table 2: Bottom three low-income countries with lower than predicted governance for their income levels

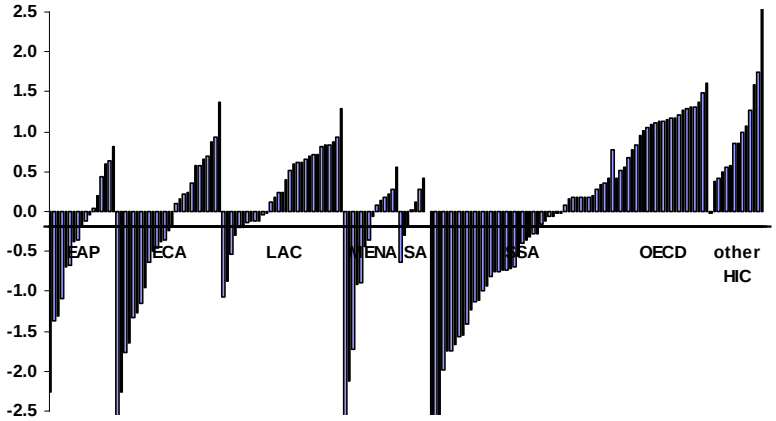
Worldwide Governance Indicator	2000		2006	
	Country	Ranking	Country	Ranking
Governance effectiveness	Angola	85	Angola	178
	Congo	184	Comoros	198
	Equatorial Guinea	182	Côte d'Ivoire	190
Regulatory quality	Angola	181	Angola	177
	Congo DR	187	Comoros	187
	Equatorial Guinea	178	Equatorial Guinea	181
Rule of law	Angola	185	Angola	185
	Congo	176	Côte d'Ivoire	193
	Equatorial Guinea	169	Equatorial Guinea	180

Source: Author's analysis based on the World Bank's Worldwide Governance Indicators.

Regulatory quality

According to the World Bank's Worldwide Governance Indicators, the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development can be captured by the second dimension—regulatory quality. Figures 4A, 4B, and 4C show the distribution of the regulatory quality score across world regions in 1996, 2000, and 2006, respectively.

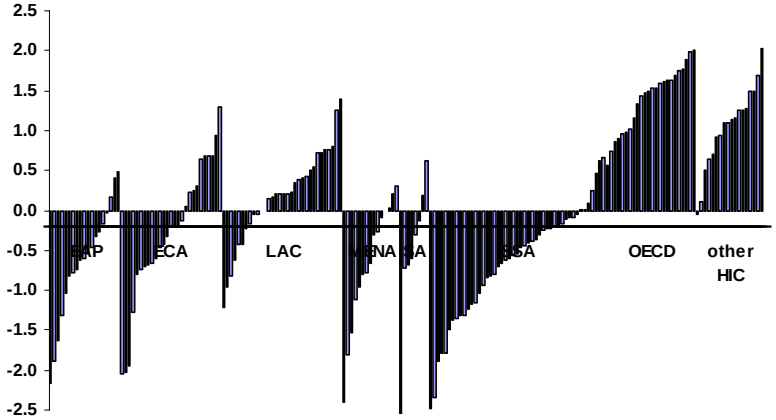
Figure 4A: Regulatory quality by region, 1996



Note: EAP –East Asia and Pacific, ECA –Eastern Europe and Central Asia, LAC – Latin America and the Caribbean, MENA –Middle East and Northern Africa, SA –South Asia, SSA –sub-Saharan Africa, OECD –Organization for Economic Cooperation and Development, HIC –high income countries.

Source: Author's analysis based on the World Bank's Worldwide Governance Indicators.

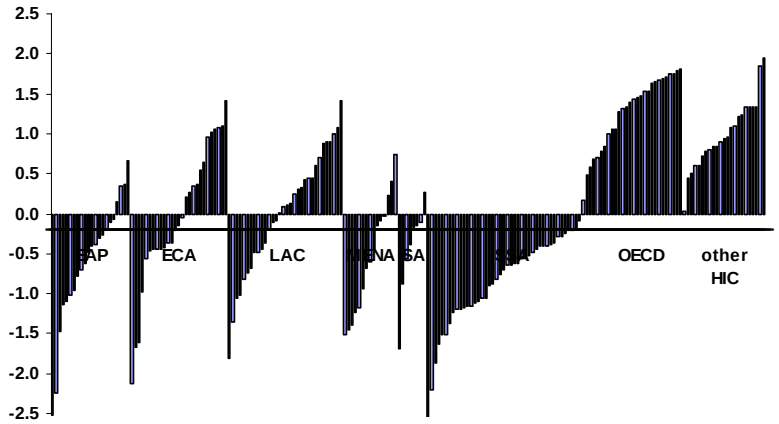
Figure 4B: Regulatory quality by region, 2000



Note: EAP –East Asia and Pacific, ECA –Eastern Europe and Central Asia, LAC – Latin America and the Caribbean, MENA –Middle East and Northern Africa, SA –South Asia, SSA – sub-Saharan Africa, OECD –Organization for Economic Cooperation and Development, HIC –high income countries.

Source: Author's analysis based on the World Bank's Worldwide Governance Indicators.

Figure 4C: Regulatory quality by region, 2006



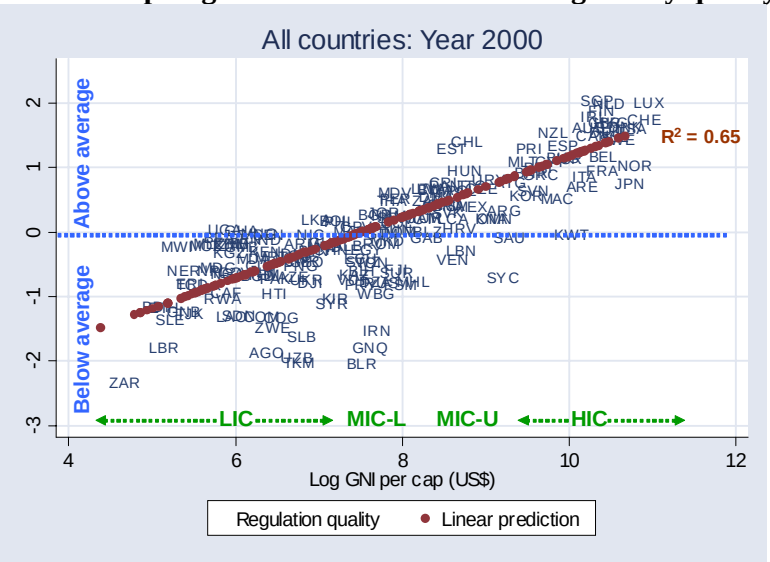
Note: EAP –East Asia and Pacific, ECA –Eastern Europe and Central Asia, LAC – Latin America and the Caribbean, MENA –Middle East and Northern Africa, SA –South Asia, SSA – sub-Saharan Africa, OECD –Organization for Economic Cooperation and Development, HIC –high income countries.

Source: Author's analysis based on the World Bank's Worldwide Governance Indicators.

Notably, all countries in the Organisation for Economic Co-operation and Development and other high-income countries, and most middle-income countries in Latin America and the Caribbean, have regulatory quality scores above the mean value ($Z > 0$); whereas, almost all countries in Sub-Saharan Africa have scores below the mean value. This pattern has been relatively consistent across world regions over the past 10 years, without significant changes over the period.

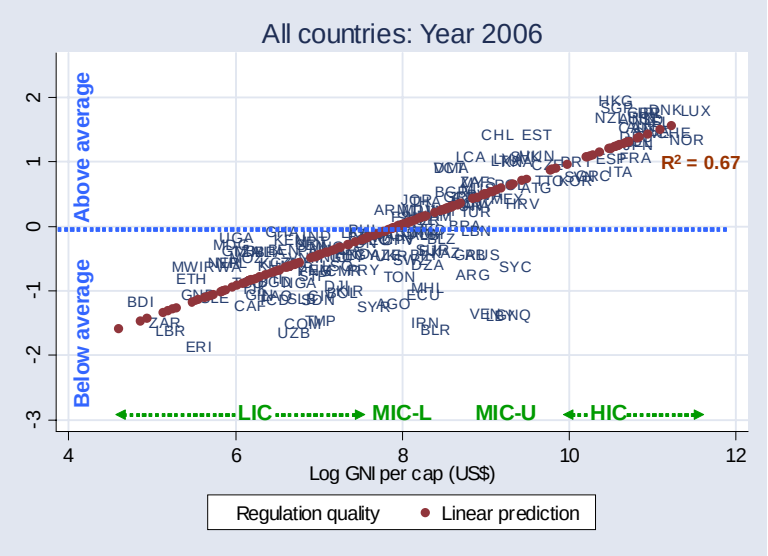
Similar to the link between national income and government effectiveness, regulatory quality has a linearly positive relationship with country economic status (figures 5A and 5B; $R^2 = 0.65$ and 0.67 for 2000 and 2006, respectively).

Figure 5A: Per capita gross national income and regulatory quality, 2000



Source: Author's analysis based on the World Bank's World Development Indicators and Worldwide Governance Indicators.

Figure 5B: Per capita gross national income and regulatory quality, 2006



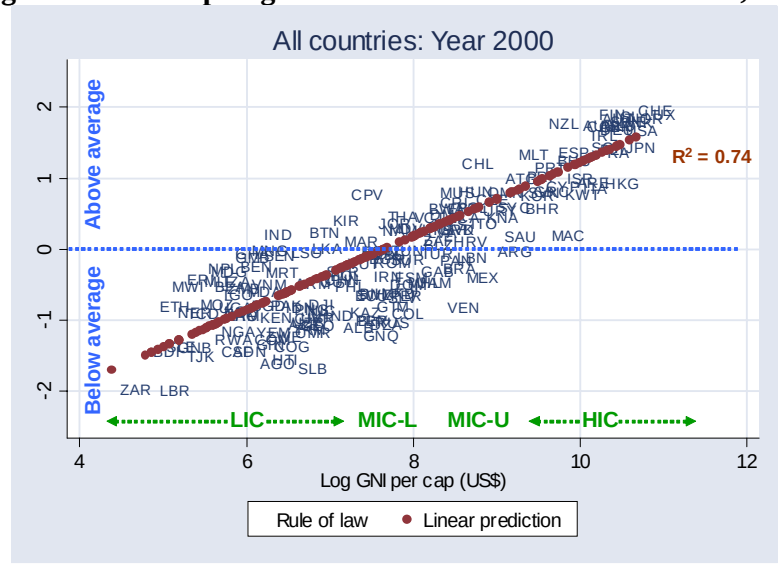
Source: Author's analysis based on the World Bank's World Development Indicators and Worldwide Governance Indicators.

The top three performers in regulatory quality among low-income countries with a similar income in 2000 and 2006 are presented in table 1, and the bottom three are presented in table 2. Regulatory quality in Ghana in 2000 and 2006, Burkina Faso and Malawi in 2000; and the Gambia and Madagascar in 2006 are among the best relative to what one would expect for their incomes.

Rule of law

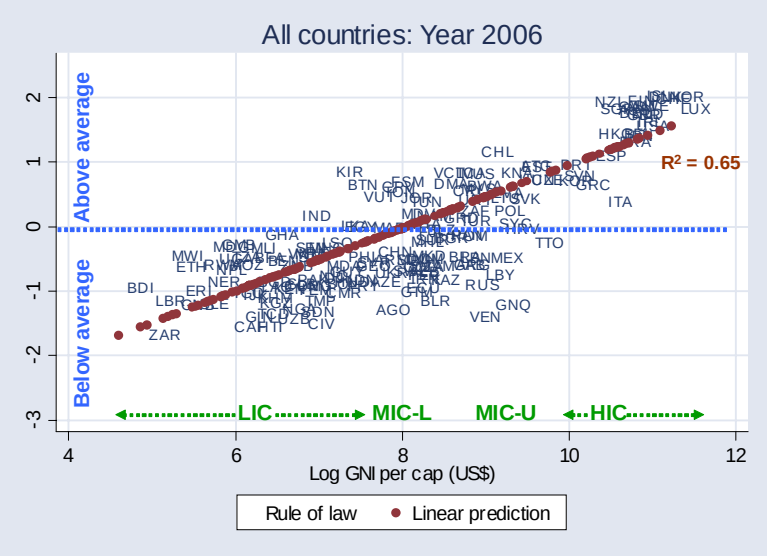
Rule of law refers to "the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, the police, and the courts, as well as the likelihood of crime and violence." As with the first two dimensions (government effectiveness and regulatory control), most low-income countries performed worse in governance than most high- and middle-income countries in terms of the rule of law (figures 6A and 6B). In 2006, some middle-income countries that are emerging economies—such as Botswana, Chile, Costa Rica, Czech Republic, Estonia, Latvia, Lithuania, and Slovenia—scored higher on the rule of law than some high-income countries, such as Greece and Italy. The top three low-income countries with a higher than predicted rule-of-law governance are the Gambia in 2000 and 2006; Eritrea and Ghanain 2000; and Bhutan and India in 2006 (table 1).

Figure 6A: Per capita gross national income and rule of law, 2000



Source: Author's analysis based on the World Bank's World Development Indicators and Worldwide Governance Indicators.

Figure 6B: Per capita gross national income andrule of law, 2006

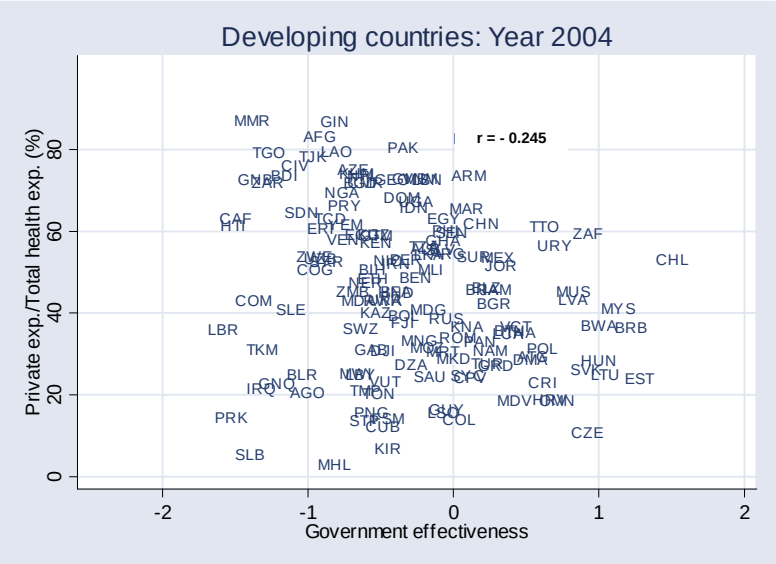


Source: Author's analysis based on the World Bank's World Development Indicators and Worldwide Governance Indicators.

Private health spending and government effectiveness and regulatory quality

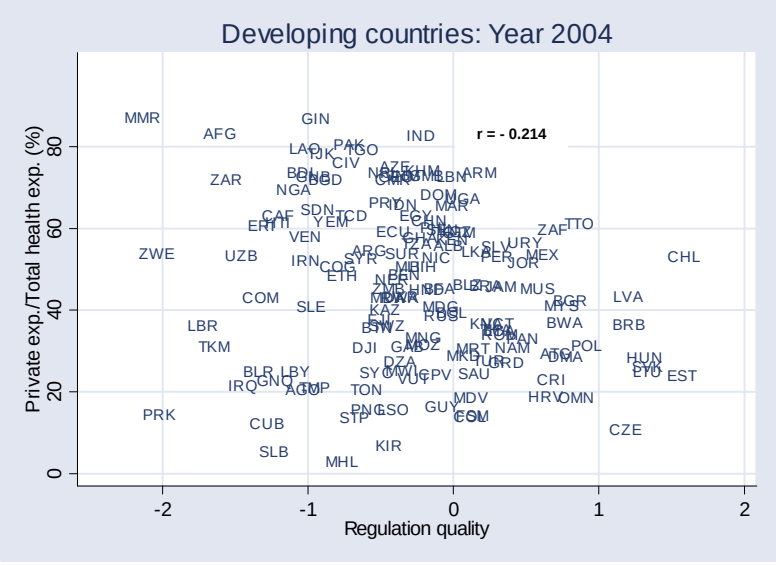
We conducted further analysis on the relationship between private health expenditure and government effectiveness and regulatory quality. We found that a country with health care paid mostly by private spending tends to perform poorly not only in the quality of public services and the credibility of the government's commitment (namely *government effectiveness*) but also in the government's ability to formulate and implement sound policies and regulations that promote private sector development (namely, regulatory quality). The negative correlation between the share of private health care expenditure and government effectiveness scores (r = –0.245) is shown in figure 7. Figure 8 shows the negative correlation between the share of private health expenditure and regulatory quality scores (r = –0.214).

Figure 7: Government effectiveness and private share of health expenditure, 2004



Source: Author's analysis based on World Health Statistics (WHO 2007) and the World Bank's Worldwide Governance Indicators.

Figure 8: Regulatory quality and private share of health expenditure, 2004



Source: Author's analysis based on World Health Statistics (WHO 2007) and the World Bank's Worldwide Governance Indicators.

Figures 7 and 8 give the impression that the private sector plays a significant role in health service provision in countries where government effectiveness and regulatory quality are poor. Engaging the private sector more in service provision requires, as a prerequisite, significant improvement in the institutional capacity of the government.

5. The Role of Self-regulation

Self-regulation is rooted in the belief that governmental authority to implement regulation can be delegated to the private sector once the roles of each actor and the rules of engagement have been established in a predictable and transparent environment. Then, the more sophisticated forms of regulation can focus on the actual process and outputs of health service delivery. Economically, the administrative and transaction costs of regulatory controls can be reduced when the government has established collaboration with private practitioner associations and other peer groups. In addition, government interaction with providers' representative organizations, based on non-financial incentives such as the desire of providers for social recognition and prestige, are helpful for promoting professional ethics and morality (Bennett and Franco 1999; Segall 2000).

The process-oriented regulation of service quality may include accreditation (and re-accreditation) of health facilities and education for health personnel, and certification (and re-certification) of practice specialties. This type of regulatory control is often accomplished through delegation of the control authority (in setting and enforcing standards) to the collaborating professional associations and independent evaluation bodies. To be useful, implementation of the accreditation and certification system should create an incentive for health care providers to improve the quality of care they deliver by sending clear and transparent signals about higher quality providers to health care purchasers and consumers.

Country experiences in self-regulation

Health facility accreditation

Accreditation of health care facilities and hospitals in particular has long been the norm in high-income countries. The U.S. Joint Commission on Accreditation of Hospitals was established in 1950, and in 1988 it was renamed the Joint Commission on Accreditation of Health Care Organizations (JCAHO). It is the first and largest accreditation program in the world (Bohigas et al. 1998) and is often cited as the prototype of self-regulated accreditation systems in the health care industry. In 1917, with a motivation of self-interest, the American College of Surgeons set up a program to ensure the high standards of hospitals. By 1950, more than half of hospitals were involved in the accreditation process. As a model of self-regulation, the processes of defining and monitoring standards remain independent, and participation by hospitals is voluntary. However, several federal and state regulations follow the JCAHO standards, and allocation of public funds and other government decisions have become increasingly tied to accreditation. As a result, JCAHO accreditation has become part of the public regulatory system (Scrivens, Klein, and Steiner 1995).

The JCAHO has been criticized for the collegial nature of its accreditation process and its inability to explicitly identify poor health care patterns. The medical profession continued to dominate the organization until 1993, when the JCAHO added more seats on its board, three for the public and one for nurses. The U.S. Centers for Medicare and Medicaid Services (CMS) have been proposed to oversee improvement at the JCAHO by, for example, making the organization a federal

contractor or by following the Government Accountability Office's suggestion of strengthening the CMS's oversight authority of the JCAHO (Moffett, Morgan, and Ashton 2005).

Taiwan is a high-income territory that has successfully implemented the accreditation system over the past 15 years. Payment eligibility for Taiwan's National Insurance has been linked to accreditation (Huang 1995). However, there has been debate over whether quality improvement methods, like health facility accreditation developed in the Western health systems, can be applied effectively in the developing countries with limited resources and services that are not well organized (Ovretveit 2002).

In Thailand, an accreditation process for the national-level hospitals was conceived as a research and development project in 1996 based on the model of the Canadian Council on Health Services Accreditation. Without any influence from the health care industry and professional organizations, the Institute of Hospital Quality Improvement and Accreditation (IHQIA) was established as a semi-autonomous agency to oversee the national accreditation program. Participating hospitals are required to follow total quality management principles and demonstrate activities in the areas of quality assurance and customer-focused, continuous quality improvement. External evaluation is carried out by a team of certified surveyors recruited using an approach similar to that used in developed countries.

The program experienced slow productivity at first. Three years after implementation in 2001, the IHQIA annual report revealed that 35 hospitals had been accredited (IHQIA 2003). However, in 2004, the number of accredited hospitals reached a total of 86 hospitals (or 6.6 percent of all hospitals). A previous national survey in 2001 by the Ministry of Public Health reported that 43.8 percent of public hospitals were not ready for the quality improvement program (MOPH 2001). To make further improvements in service quality, hospitals usually have to rely on their own limited budgets. The National Health Security Office, which is the national purchaser of the current universal health care (UC) plan, has stepped in by granting a special budget to promote the quality improvement program as a requirement for hospitals under the UC contract. As a consequence, hospitals have perceived the accreditation a mandatory process.

The most recent national survey of health care providers and surveyors in 2004 revealed that "adequacy of staff" and "information utilization and integration" were the two structural and process measures raised by the respondents as the major obstacles to fulfilling the accreditation requirement (Pongpirul et al. 2006).

Kyrgyz Republic is one of the nine low- and middle-income countries that the World Bank acclaimed for its accomplishment in health sector reforms initiated in 1996. The health care coverage reform received strong support in its early phase from the president of the country. In addition, key policymakers in the country were willing to discuss the problematic issues in broken systems that were inherited after the breakup of the Soviet Union in 1991 The continuous quality improvement system has been introduced in health care services by the health reform project sponsored by the U.S. Agency for International Development. The system relies on supportive supervision systems (by what are called local curators) to assess service quality using four tools—client exit interviews, facility walk-throughs, curator observation of service provision,

and facility self-assessment. Once problems have been identified, the medical staff (through family group practice) works as a team to prioritize and decide how to solve the problems. An action plan is developed; each problem is assigned to an individual who takes lead responsibility for implementing the solution. The curator returns to assess progress and to repeat the cycle three months thereafter.

A set of 11 hospital standards has been established as a requirement that hospitals must satisfy to receive a license from the government.[6] The hospital accreditation body has been developed as a council run by three parties, the Ministry of Health, health insurance, and the physician association (Becker and Ente 1995). In 1997, the Medical Accreditation Commission, with financial and technical support from the U.S. Agency for International Development (not from the government's budget), was established as an independent agency to implement quality improvement at the facility level through reward systems as well as the broader health system reform through payment eligibility linkage with the state health insurance plan. The commission has already accredited 85 of the 387 state health facilities to date, and it has a plan to accredit private hospitals.

Experience in Zambia revealed several administrative and infrastructural problems in implementing the national accreditation system (Bukonda et al. 2002). In 1997, the accreditation process, which was conducted by the Zambian Health Accreditation Council, still relied on observation and interviewing, rather than documentation. Productivity of the accreditation process was found to be low at the national level because of the lack of incentive for hospitals to take part in the process.

Other than hospital accreditation, in rural and peri-urban Tanzania a network of drug dispensing outlets, the Accredited Drug Dispensing Outlets (ADDOs), has been governed by an accreditation system administered by the Tanzania Food Drug Authority (Ndomondo-Sigonda et al. 2003). The accreditation program is supported by a multi-faceted strategy, including training and supervision of the dispensing staff, outlet inspections, marketing, and public education. The unregistered drugs found in the accredited areas has decreased substantially more than in the control areas. In 2006 and 2007, reports were published on the country's experience with the distribution of artemisinin-based combination therapy as the first-line treatment of malaria and the Integrated Management of Childhood Illness for diarrhea, pneumonia, and malaria through the private sector network of ADDOs, supported by the U.S. Agency for International Development through Management Sciences for Health (MSH 2006; MSH 2007).

Challenges to self-regulation

Self-regulation of medical professionals is prone to regulatory capture by self--interested groups and can be misused when they serve the interests of their members rather than ensuring the public interest. This self-serving interest has been cited as one of the major disadvantages of self-regulation apart from other problematic issues

[6] The standards pertain to (1) licensed physicians; (2) nursing care; (3) beds; (4) medical equipment and surgical instrument; (5) linens, bed supplies, and other hotel service necessities; (6) sanitary facilities; (7) drinking water; (8) food service; (9) transportation or access to transportation; (10) working telephones; and (11) public health and environmental standards (Becker and Ente 1995).

including a motive toward monopoly, exclusion of public from rule setting, and weak legal oversight and enforcement (Baldwin and Cave 1999).

In Zimbabwe, the medical council did not publicize malpractice cases for fear of damaging the medical profession's reputation (Bennett and Ngalande-Banda 1994). In Thailand, the medical council disciplined members in reaction to media attention (Teerawattananon et al. 2003).

The Working Group on the Non-State Sector provided a summary of evidence on accreditation and certification interventions that focus primarily on improving the quality of health services (Bennett et al. 2005). It was concluded that the effectiveness of accreditation has been well demonstrated in developed and middle-income countries but has had a mixed record of success in low-income countries. There is limited empirical evidence on the effectiveness of certification. Both process-based interventions may be more effective when implemented in conjunction with a powerful purchasing system such as social health insurance plan. Similarly to regulatory capacity, the strong health care purchaser, size of membership, and population coverage are unfortunately not very well developed in low-income countries.

6. Regulation: Incentive-based Measures

To change behaviors in the delivery and use of health care services, regulatory instruments do not necessarily have to be implemented through legal controls. Incentives, either monetary rewards or penalties, have proved to be a viable alternative to regulatory measures.

Legislative efforts to regulate the private health sector often have insufficient impetus to move to actual service delivery (Soderlund and Tangcharoensathien 2000). With the limited success stories of traditional command-and-control measures in low- and middle-income countries, interest has recently shifted to the use of less-costly market harnessing incentives to affect behavior in health service delivery and utilization.

The incentives can be in both financial and non-financial forms (Kumaranayake 1997). A recent review of dual practice suggested that bureaucratic control over practitioner behavior tended to be ineffective unless the underlying financial incentives were corrected (Ferrinho et al. 2004). Cassels (1995) concluded that legal interventions alone would have little influence on the behavior of for-profit providers and that complementary solutions such as incentives and competitive contracts are required.

Results-based financing and service contracting

In Brazil, where hospitals are pluralistic and absorb nearly 70 percent of public spending on health, a very recent World Bank report that draws from several evaluative studies reveals that hospital performance depends on not only regulatory control of quality through licensing and accreditation but also various incentives

available through financial arrangements in hospital payment systems (La Forgia and Couttolenc 2008).

Currently, to improve health service delivery in the developing countries, international donors and development agencies have become interested in pay-for-performance or results-based financing. The most recent initiative occurred in December 2007, when the World Bank and Norway established a $105 million trust fund to provide financing to selected low-income countries over a six-year period to pilot results-based financing programs.[7]

Empirical evidence of the effectiveness of supply-side incentives such as service delivery contracting with the private sector has recently been reviewed (Loevinsohn and Harding 2005; Liu, Hotchkiss, and Bose 2008). However, lessons learned from the low- and middle-income countries' experience seem to suggest that, for developing countries, contractual agreements for health care services are more like a long-term "relational contracting"[8] than a formally enforced, written contract as in the developed countries (Palmer 2000). Thus, there is potential for gradually reorienting the public and private contractors' behavior toward achieving health system goals.

Doing private business

One important aspect of the incentive-based mechanism is to look at how regulations play an enabling role for private business in different countries. Under the private sector development agenda of the World Bank, the Doing Business project has assessed the degree to which each country's regulatory environment is conducive to business operation. In 2004, the first in a series of annual reports investigated how and to what extent business regulations either enhance or constrain business activity in 130 countries, using input from and verification by local experts (World Bank 2004). The report revealed that low-income countries imposed regulatory procedures on business more often than high-income countries did. It is interesting to note that heavier regulation was found to be a statistically significant link to the size of the informal economy and corruption, while an improvement in regulatory quality was associated with the less informal economy.

The most recent Doing Business report ranks 178 countries according to regulatory performance from April 2006 to June 2007 on 10 stages in a business's life: (1) starting a business, (2) dealing with licenses, (3) employing workers, (4) registering property, (5) obtaining credit, (6) protecting investors, (7) paying taxes,(8) trading across borders, (9) enforcing contracts, and (10) closing a business (World Bank 2007b). As is usually the case, most low-income countries, especially those in Sub-Saharan Africa, received a rating of "difficulty" in doing business based on the 10-

[7] The first round of support, covering two to three years, will be given to four countries: Afghanistan, Eritrea, Rwanda, and Zambia. A similar type of results-based financing program with bilateral Norwegian involvement to reduce maternal and child mortality and morbidity has included countries such as India, Nigeria, Pakistan, and Tanzania.

[8] "Relational contracting" is characterized by "the entire relation as it has developed through time" (MacNeil 1974). Hence, the specific stipulations in the contract become less important than the need to harmonize conflict and preserve the relationship between contractors and contracting parties.

dimension average. Ghana and Kenya are the two Sub-Saharan African countries listed as the top 10 reformers whose regulation facilitated the private sector in at least three dimensions in 2006–2007. Other examples that were praised for business regulation reforms are Tanzania, Nigeria, Rwanda, Niger, Mauritius, Mali, Burundi, Lesotho, and Uganda (World Bank 2007b). Nigeria is also the first country in Sub-Saharan Africa that has been analyzed in detail at the subnational level.

7. Corruption

Corruption results in not only an immediate cost due to a direct loss of money to society in the short term but also a long-term consequence affecting the quality of government and the well-being of the population.

Corruption Perceptions Index

Transparency International has published its Corruption Perceptions Index (CPI) for each country every year since 1995. The index for most countries is aggregated from several survey data sources. The scores range from 0 to 10, 10 being the "cleanest" country. Similar to the Worldwide Governance Indicator of corruption control and others, most developing countries receive a relatively low score as compared with the developed countries. Some middle- and low-income countries, however, have experienced a major improvement from the past.

Tables 3A, 3B, and 3C present certain developing countries with an increase in the CPI by at least 0.5 score by three income subgroups (upper-middle-income countries, lower-middle-income countries, and low-income countries). Changes in the CPI from 2000 to 2007 (the most recent year) are presented in the next-to-last column, and the statistical significance level (P-value) of the improvement appears in the last column. Note that only the countries that have both-year CPI data were included in the analysis.

Table 3A: CPI scores (mean, rank, and change) 2007 vs. 2000 in upper-middle-income countries

Country	Region	2007		2000		Change 2007–2000	P-value
		CPI	Rank	CPI	Rank		
Estonia	Europe/Central Asia	6.5	31	5.7	27	0.8	NS
Czech Republic	Europe/Central Asia	5.2	53	4.3	41	0.9*	0.0184
Slovak Republic	Europe/Central Asia	4.9	62	3.5	51	1.4*	0.0071
Lithuania	Europe/Central Asia	4.8	63	4.1	42	0.7*	0.0563
Latvia	Europe/Central Asia	4.8	64	3.4	56	1.4*	0.0276

Note: NS indicates a statistically non-significant ($P \geq 0.05$) change in CPI score.
Source: Author's calculations based on Transparency International data.

Table 3B: CPI scores (mean, rank, and change) 2007 vs. 2000 in lower-middle-income countries

Country	Region	2007		2000		Change 2007–2000	P-value
		CPI	Rank	CPI	Rank		
Bulgaria	Europe/Central Asia	4.1	77	3.5	51	0.6	NS
Colombia	Latin America/Caribbean	3.8	82	3.2	59	0.6*	0.0750
Romania	Europe/Central Asia	3.7	84	2.9	67	0.8*	0.0631

Source: Author's calculations based on Transparency International data.

Table 3C: CPI scores (mean, rank, and change) 2007 vs. 2000 in low-income countries

Country	Region	2007		2000		Change 2007–2000	P-value
		CPI	Rank	CPI	Rank		
India	South Asia	3.5	89	2.8	68	0.7*	0.0064
Tanzania	Sub-Saharan Africa	3.2	110	2.5	75	0.7*	0.0184
Armenia	Europe/Central Asia	3.0	118	2.5	75	0.5*	0.0701
Mozambique	Sub-Saharan Africa	2.8	129	2.2	80	0.6*	0.0403
Uganda	Sub-Saharan Africa	2.8	131	2.3	79	0.5*	0.0853
Ukraine	Europe/Central Asia	2.7	135	1.5	86	1.2*	0.0011
Indonesia	East Asia/Pacific	2.3	161	1.7	84	0.6*	0.0205
Nigeria	Sub-Saharan Africa	2.2	163	1.2	89	1.0*	0.0023
Angola	Sub-Saharan Africa	2.2	165	1.7	84	0.5	NS
Azerbaijan	Europe/Central Asia	2.1	172	1.5	86	0.6*	0.0646

Note: * indicates the statistical significance ($P < 0.10$) of a score change from 2000 to 2007.
Source: Author's calculations based on Transparency International data.

Successful implementation and monitoring of command-and-control measures require a well-resourced regulatory framework. At the same time, enforcement and sanctioning by legal restrictions can be achieved only under a well-functioning judicial system. In 2007, Transparency International published its *Global Corruption Report* on the issue of judicial corruption (Transparency International 2007). The report contains country case studies of challenges and opportunities in the judicial systems of 32 countries, nearly all of which are low- and middle-income countries. The 32 countries are Algeria, Azerbaijan, Bangladesh, Cambodia, Chile, Costa Rica, Croatia, Czech, Egypt, Georgia, Ghana, Guatemala, India, Israel, Kenya, Mexico, Mongolia, Morocco, Nepal, Niger, Pakistan, Palestine, Panama, Paraguay, Philippines, Papua New Guinea, Romania, South Africa, Sri Lanka, Turkey, United Kingdom, and Zambia.

In Nigeria, even though the drug regulatory authority (NAFDAC) has provided evidence of drug counterfeiting, the country's judicial authorities have on occasion failed to act against counterfeiters—for example, by restraining NAFDAC from taking further action against arrested counterfeiters without court clearance (Akunyili 2006).

The 2006 issue of Transparency International's *Global Corruption Report* is devoted to the health sector. Risks of corruption in the health sector are uniquely influenced by

several factors. A prevailing asymmetry of health information between patients and health care providers, the uncertainty of illnesses and treatment outcomes, and the complex interactions among various actors (patients, providers, suppliers, payers, and government regulators make the health sector particularly vulnerable to corruption (Savedoff 2006).

Expensive facility construction, high technology equipment, and innovative drugs needed for treatment, combined with a powerful market of vendors and pharmaceutical companies, pose risks of bribery and conflict of interest to the health sector (Lantham 2001; Kassirer 2006). At the same time, the discretionary power of government officers to license or accredit health facilities, practitioners, products, and services can lead to abuse of power and resource allocation.

The forms of corruption revealed by Transparency International's *Global Corruption Report 2006* range from destructive forms like embezzlement and theft from health care budgets or user-fee revenues, corruption in procurement and payment systems, to controversially minor forms like informal payments for services to health care providers.[9]

The 2006 report suggests that measures should be tailored to fit the particular context of a country's health system. Preventive measures, apart from the law, include procurement guidelines and codes of conduct for both institutional and individual operators, and transparency and monitoring procedures (also through civil society participation and oversight). The report contains country case studies of corruption in the health sector on the following topics: causes (Cambodia, the United States); scale (Britain, Central and Eastern Europe, Costa Rica, Mexico, Philippines); hospitals (Croatia, India, Kenya); informal payments (post-communist Europe and Central Asia, Hungary, Morocco); and drugs (India, Nigeria, Thailand).

Control of corruption

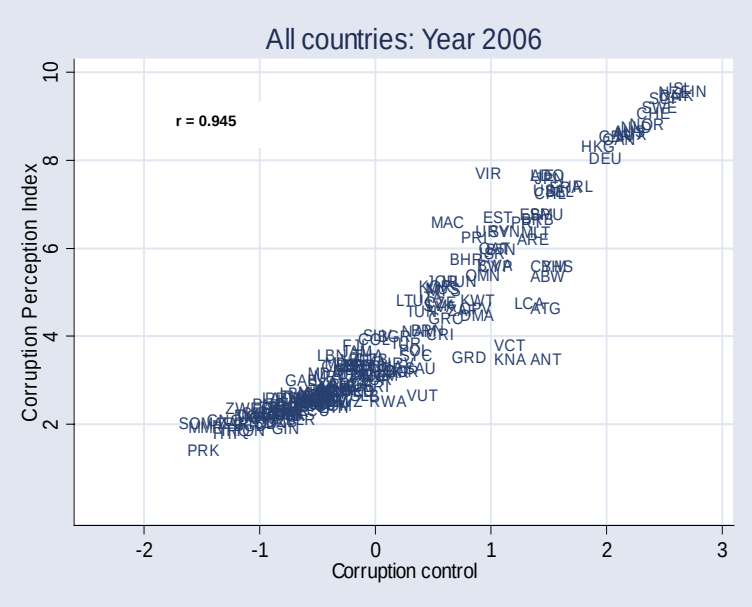
The World Bank defines the Worldwide Governance Indicator of control of corruption as "the extent to which public power is exercised for private gain, including both petty and grand forms of corruption and capture of the state by elites and private interests."

A public expenditure tracking survey has been used in a very recent World Bank study to reveal the practice of informal payments as an indicator of corruption in Tajikistan's health sector (Dabalen and Wane 2008). The study provides evidence that health workers are more likely to engage in informal charging the farther they fall short of their perceived fair wage and that those who feel that health care should be provided for a user fee are more likely to charge patients informally.

Figure 9 shows that control of corruption, among the World Bank's Worldwide Governance Indicators, is strongly correlated with Transparency International's CPI (correlation coefficients > 0.90 for every year). The greater the government's capacity to control corruption, the higher its ranking as a "clean government" on the CPI.

[9] There is not a clear line between bribes and gifts, and some forms of reciprocity that are seen as normal in one country may be illegal in another (Gaal and McKee 2005).

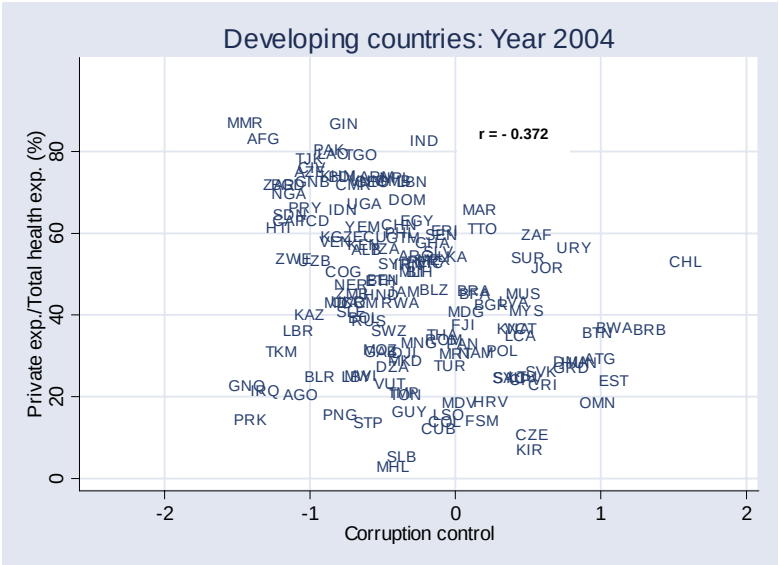
Figure 9: Control of corruption and CPI, 2006



Source: Author's analysis based on the World Bank's Worldwide Governance Indicators and Transparency International's CPI data.

We conducted an analysis of the relationship between the level of private health expenditure and the Worldwide Governance Indicator of control of corruption. The challenging issue found in this analysis is that the countries with a large share of private health spending do not perform well in their control of corruption (figure 10; r = –0.372). There was a weak negative relationship between the two parameters: the higher the level of private health expenditure, the weaker the country's capacity to control corruption.

Figure 10: Corruption control and private health share in developing countries, 2004



Source: Author's analysis based on World Health Statistics (WHO 2007) and the World Bank's Worldwide Governance Indicators.

8. The Role of Consumers

Demand-side intervention can be viewed as an institution-light option and bottom-up approach to health care regulation. In developed countries, market mechanisms place a priority on the involvement of civil society, such as public information and local initiatives to strengthen citizens' voices. In developing countries, however, consumer information and disclosure as a regulatory intervention are less present than other measures.

A lack of knowledge of transplant regulations has been cited as an important information gap that may cause illegal kidney transplantation in Thailand (Tungsiripat and Tangcharoenssathien 2005). Consumers' lack of information about providers was found to be a major impediment to improvement of rural health services in China (Bloom and Jing 2003). A very recent review suggested that governments in low- and middle-income countries were well aware of the need to reinforce control-based heath regulation with enabling incentives and promoted greater access to quality service information to both consumers and providers (Ensor and Weinzierl 2007).

Country experiences in consumer movements

Educating consumers is a powerful way to make people aware of their rights and of what constitutes good health care. Belows are specific cases of the country experiences.

Consumer courts in India

In India, where the Medical Council is not very proactive in taking disciplinary action against medical malpractice or on patient complaints, consumer groups play a vital role by taking cases to court and arguing that, for health care services, patients should receive the same protection as for any other goods covered by the 1986 Consumer Protection Act. In 1995, the Indian Supreme Court ruled in favor of consumers that Indian doctors could be sued for medical negligence in consumer courts[10] despite the strong argument made by the medical associations against jurisdiction over medical services (Mudur 1995; Naylor et al. 1999). Although this change was recognized as a major movement in favor of patients' rights and improvements in health care, other complementary measures were needed to confront emerging challenges such as an increasing case load[11] and a growing tendency toward practicing defensive medicine (Bhat 1996).

Health reform activists in Nigeria

In Nigeria, the Health Reform Foundation of Nigeria (HERFON), originally funded by the United Kingdom's Department for International Development through the Change Agent Program, was founded by a group of reform-minded Nigerians to support the government in achieving health sector reform objectives in three areas:

[10] As of 1996, there were about 500 consumer courts in India.

[11] Consumer courts have faced difficulty because of inadequate staff and lack of necessary infrastructure. As a consequence, the number of pending cases was increasing, also due partly to the complexity of medical issues.

health systems, immunization, and HIV/AIDS. It has a membership of about 1,000 change agents (including health officials, media, and religious and opinion leaders) in all 36 states of the country. HERFON has helped develop the new National Health Policy and National Health Act, and has conducted a study of private providers in two states, Benue and Enugu. In terms of generating evidence and information, HERFON published a comprehensive national report on health systems in 2006, the *Nigerian Health Report*.

In 2005, campaigns focusing on the rights of patients and consumers were launched in the Nigerian mass media, and these campaigns were expected to increase public awareness of the right to quality health services. One example is NAFDAC's campaign to increase awareness that individuals have the right to demand and know the names of drugs prescribed to them by health workers. In addition to the media-based activities, the placement of complaint boxes in health facilities in Ekiti State is a recent effort to promote consumer awareness and rights in the health sector.

Examples of successful implementation of community empowerment in Nigeria are the Catchment Area Planning and Action approach (to improve immunization, nutrition, and malaria prevention for children through community empowerment) (Brieger, Salami, and Ogunlade 2004) and the Making Pregnancy Safer initiative (to reduce maternal mortality using essential obstetric care) (Fatusi, Akinsanmi, and Adekogba 2006).

Health professionals and nongovernmental organizations in Thailand

In Thailand, health professional activists who have an ideological commitment to serve the rural public often play an active role in resolving the chronic problems of health service and resource shortage and mal-distribution. In 1998, they took a historic step, through the Rural Doctor and Pharmacist Societies, by forming a coalition with nongovernmental organizations against corruption in the Ministry of Public Health (Trirat 2000; Tumkosit 2000; Wongchanglaw 2003; Cameron 2006).

They began to collect evidence of corruption in the procurement of medicines and medical supplies, encouraged their members to step forward as witnesses, and provided information to the mass media and the public. The coalition petitioned the court to force the country's National Counter Corruption Commission to release information on the case, and the court later ruled in the coalition's favor. An investigative committee confirmed that politicians and civil servants in the Ministry of Public Health had engaged in corruption. The committee recommended that the procurement system be reformed and that those found guilty of corruption be punished.

The minister and his deputy resigned as a result, and several senior and mid-level officials were dismissed or reprimanded. In November 2004, the Minister of Public Health was found guilty of accepting bribes from pharmaceutical companies and was sentenced to 15 years' imprisonment. This historic case of coordination among civil societies, which previously knew little about each other's work, has helped stimulate good governance in the Thai health system.

Civil society involvement in health reforms in Thailand

The National Health Security Board oversees the implementation of Thailand's universal health care coverage plan since its inception in 2001. The multi-stakeholder membership of the Board consists of representatives from private hospital association, multi-sectoral government ex-officio, and civil society, especially from consumer protection associations. This provides a platform to reflect the needs of the public views from lay sector to balance the interests of private health sector, which are normally dominated by self-interest of for-profit hospitals and health professionals.

A major factor limiting the involvement of consumers and civil societies is their ability to judge clinical quality. Hence, other potential approaches to strengthening the position and voice of consumers in the private health sector should include direct consumer education, dissemination of information about prices, and social marketing mechanisms (Mills et al. 2002).

Citizen voice and government accountability on control of corruption

According to the Worldwide Governance Indicators definition, the concept of voice and accountability means "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 a free media" (World Bank 2007a). The essence of accountability is "answerability" and "sanctions" (Brinkerhoff 2003). For the accountable actor, being accountable means having an obligation to answer the questions of the overseeing actor regarding decisions and/or actions (Schedler 1999), which can be accomplished in two ways: by reporting "what was done" and by explaining "why was it done."

The justification aspect links to the World Health Organization's notion of stewardship and its contribution to government responsiveness and good governance (Travis et al. 2002). Strong accountability requires a second component, sanctions, which is the ability of the overseeing actor to impose punishment to hold responsible parties accountable for failures and transgressions uncovered through answerability.

This can be accomplished through laws, professional codes of conduct, and incentives in the form of market mechanisms and public exposure. Strategies to enhance the accountability of government should focus on the following objectives: reducing abuse (containment of fraud, misuse, and corruption); ensuring compliance with procedures and standards through regulation, oversight, monitoring, and reporting; and improving performance and learning by clarifying, and shortening the chains of accountability and making the chains more powerful.

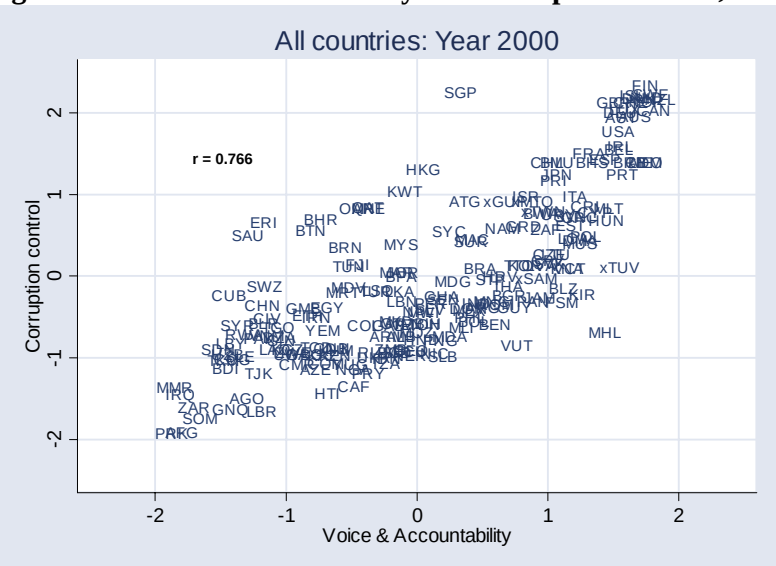
In health systems, areas where increased accountability can help combat abuse include contracting procedures, drug purchasing and distribution, collection and management of user fees, and management of health workers—for example, to curtail informal payments and absenteeism or dual practice. An example of success is drug procurement reform in Chile, which involved an electronic bidding system, decentralization of purchasing, and institutional restructuring of the drug-purchasing agency and which resulted in a decline in corruption (Cohen and Montoya 2001).

A very recent review by Vian (2008) sheds light on a theoretical framework for examining corruption in the health sector at the individual level and possible interventions to counteract it. The paper analyzed six factors that facilitate opportunity to abuse, which is one of the three main forces driving corruption by government actors. The six factors are monopoly (a market structure that limits choice of providers), discretion (autonomous decision-making power), accountability (a government's obligation to respond publicly and demonstrate the effectiveness of its actions), citizen voice (channels and means for active participation by stakeholders), transparency (mandated disclosure of information), and detection and enforcement (evidence gathering and punishment). These are the key points that anti-corruption strategies should address.

The paper suggests that attention should be given to designing and testing anti-corruption interventions—for example, in the area of pharmaceuticals, as has been developed through the experience of Extractive Industries Transparency Initiatives (funded by the Department for International Development's Medicines Transparency Alliance) and by the World Health Organization's Good Governance in Medicines Program. Other issues that should be addressed to ensure policy effectiveness and conditions for success include absenteeism and ghost workers (Alcazar and Andrade 2001; Chaudhury and Hammer 2004; Garcia-Prado and Chawla 2006) and informal payments (Kutzin et al. 2003; Ensor 2004; Lewis 2007). The paper noted the importance of refining and adapting the more general anti-corruption strategies, such as watchdog agencies and whistle-blowing programs in the health sector.

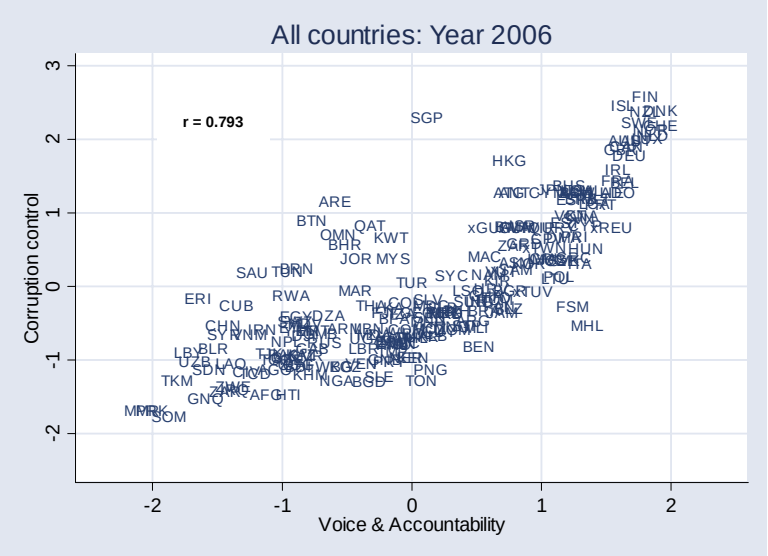
There is a close link between two dimensions of the Worldwide Governance Indicators: control of corruption and voice and accountability. Our analysis found that countries with a good governance ranking on the voice and accountability dimension perform well on the control of corruption (figures 11A and 11B; r = 0.766 and 0.793 for the years 2000 and 2006, respectively). The exceptional countries that seem to perform well on control of corruption but not so well on the dimension of voice and accountability are Hong Kong and Singapore, and some Arabian countries like Bahrain, Kuwait, Oman, and Saudi Arabia.

Figure 11A: Voice/Accountability and corruption control, 2000



Source: Author's analysis based on the World Bank's World Development Indicators.

Figure 11B: Voice/Accountability and corruption control, 2006



Source: Author's analysis based on the World Bank's World Development Indicators.

Low-income countries where observed governance, either control of corruption or voice and accountability, was higher than the average for comparable income levels are shown in table 4; those that had a lower than average governance ranking are shown in table 5.

Table 4: Top three low-income countries with higher than predicted governance for their income levels

Worldwide Governance Indicator	2000		2006	
	Country	Ranking	Country	Ranking
Control of corruption	Bhutan	53	Bhutan	40
	Burkina Faso	79	Eritrea	87
	Ethiopia	113	Ethiopia	123
Voice and accountability	Benin	70	Benin	81
	Madagascar	86	Ghana	76
	Malawi	98	Madagascar	98

Source: Author's analysis based on the World Bank's Worldwide Governance Indicators.

Table 5: Bottom three low-income countries with lower than predicted governance for their income levels

Worldwide Governance Indicator	2000		2006	
	Country	Ranking	Country	Ranking
Control of corruption	Angola	184	Angola	180
	Azerbaijan	87	Azerbaijan	167
	Cameroon	84	Côte d'Ivoire	151
Voice and accountability	Angola	176	Angola	175
	Congo	181	Azerbaijan	168
	Equatorial Guinea	182	Equatorial Guinea	192

Source: Author's analysis based on the World Bank's Worldwide Governance Indicators.

Rather than looking at cross-country comparisons for comparable economic levels, it is interesting to see whether a country has improved in its governance over time. Countries that demonstrated major improvement in corruption control are Liberia, Serbia, Rwanda, Tanzania, and Colombia; those that demonstrated the greatest deterioration in corruption control are Tonga, Zimbabwe, Eritrea, Côte d'Ivoire, and Bangladesh. For voice and accountability, major improvement was found in Niger, Serbia, Sierra Leone, Indonesia, and Ghana; the greatest deterioration was found in Nepal, Thailand, Belarus, Côte d'Ivoire, and Zimbabwe.

9. Conclusions

In 2004, a study of 17 successful global public health programs,[12] many of them implemented or scaled up in developing countries, analyzed what had made the programs effective and identified the following elements of success: (1) predictable, adequate funding from both international and local sources; (2) political leadership and champions; (3) technological innovation with an effective delivery system at a suitable price; (4) technical consensus about the appropriate biomedical or public health approach; (5) good management on the ground; and (6) effective use of information (Levine et al. 2004).

In 2008, the World Bank identified general enabling conditions for good practices in health financing (expanding health care coverage and protecting against catastrophic

[12] The programs focused on eradicating smallpox, preventing HIV and sexually transmitted infections in Thailand, controlling tuberculosis in China, eliminating polio in the Americas, saving mothers' lives in Sri Lanka, controlling onchocerciasis in Sub-Saharan Africa, preventing infant deaths from diarrhea in Egypt, improving health in Mexico, controlling trachoma in Morocco, reducing guinea worm disease in Africa and Asia, controlling Chagas' disease in the southern cone of South America, reducing fertility in Bangladesh, curbing tobacco use in Poland, eliminating measles in southern Africa, preventing iodine deficiency in China, preventing dental caries in Jamaica, and preventing Hib disease in Chile and the Gambia.

health expenses) in two low-income countries, four lower-middle-income countries, and three upper-middle-income countries[13] (World Bank 2007b). The enabling conditions are (1) economic, institutional, and societal factors; (2) policy factors; and (3) implementation factors. The first condition is described as strong and sustained economic growth, long-term political stability and sustained political commitment, a strong institutional and policy environment, and a well-educated population. The second condition includes financial resources committed to health, a commitment to equity and solidarity, health coverage and financing mandates, consolidation of risk pools, recognized limits to decentralization, and a focus on primary care. The third condition is carefully sequenced health service delivery and provider payment reforms, good information systems and evidence-based decision making, strong stakeholder support, efficiency gains and co-payments used as financing mechanisms, and flexibility and mid-course corrections. The report recommended, as one of the important actions to be taken to learn from success stories, that system characteristics in each country be scrutinized in detail for their critical components and the interactions among them.

Similarly, a single implementation of regulatory intervention through direct command and control alone cannot be said to work effectively to reorient the contribution of the private health sector toward achieving the health system goals of quality, efficiency, and equity. A conducive environment and other contextual factors are required.

Evidence has shown that the private health care sector plays a major role in terms of magnitude of service provision and household direct expenditure on health services. At times, especially in most of the low-income countries in Sub-Saharan Africa, the private sector operates in an environment of poor government effectiveness and low regulatory quality. Engaging the private sector to assume a greater role should take into account the challenging prerequisite of increased government capacity to regulate well, including command and control, self-regulation by professional bodies, and the role of insurance plans through incentives and competitive contractual relationships between purchasers and health care providers. Civil societies and consumer protection organizations can play a significant role to ensure that public voices are heard and policy actions are taken accordingly.

[13] The low-income countries are the Kyrgyz Republic and Vietnam. The lower-middle-income countries are Colombia, Sri Lanka, Thailand, and Tunisia. The upper-middle-income countries are Costa Rica, Chile, and Estonia.

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Appendix: Country Profiles

The 13 countries profiled in this appendix have been mentioned in the full report for their experiences and challenges in health regulation, in particular, or the assessment of their governance and government stewardship roles, in general. The major aim of the one- to two-page profiles presented here is to shed light on the socioeconomic and political environments that are enabling factors for each country's achievements in the regulation and reform of the health sector.

Five low- and middle-income countries in Asia are profiled in this appendix. They are India, Kyrgyz Republic, Laos, Thailand, and Vietnam. Eight countries in Sub-Saharan Africa are profiled: Ghana, Kenya, Malawi, Nigeria, Rwanda, Tanzania, Uganda, and Zambia.

Regulation-related experience specific to each country is as follows:

Ghana	Governance
India	Medical practice and civil society movements
Kenya	Business climate
Kyrgyz Republic	Hospital accreditation
Laos	Pharmacy regulation
Malawi	Medical practice Governance
Nigeria	Pharmacy regulation Civil society movements Business climate
Rwanda	Governance Business climate
Tanzania	Drug dispensing outlet accreditation
Thailand	Pharmacy regulation Hospital accreditation Civil society movements
Uganda	Governance Business climate
Vietnam	Pharmacy regulation
Zambia	Hospital accreditation

Data sources

The followings are the sources of information unless otherwise stated:

BBC News online: Country Profiles: Facts
(http://news.bbc.co.uk/2/hi/country_profiles/default.stm)

World Bank's HNP Stats: Health expenditure 2000–2004 time series
(http://info.worldbank.org/governance/wgi/index.asp)

World Bank's Worldwide Governance Indicators: Governance 1996–2006 time series
(http://info.worldbank.org/governance/wgi/index.asp)

World Bank's Doing Business Project
(www. doingbusiness.org/)

Ghana

Facts (Source: From BBC News online)

- **Population:** 23.5 million (UN 2007)
- **Area:** 238,533 sq km (92,098 sq miles)
- **Major languages:** English, African languages including Akan, Ewe
- **Major religions:** Christianity, indigenous beliefs, Islam
- **Life expectancy:** 60 years (men), 60 years (women) (UN)
- **Gross national income per capita:** US $450 (World Bank 2006)

Health expenditures

	2000	2001	2002	2003	2004
Total health expenditures per capita	$17	$19	$19	$24	$27
Total health expenditures as a percentage of gross domestic product	6.9%	7.1%	6.3%	6.7%	6.7%
External resources as a percentage of total health expenditures	9.9%	14.0%	16.2%	28.5%	29.9%
Private expenditure as a percentage of total health expenditures	62.6%	60.1%	61.9%	58.6%	57.8%
Out-of-pocket spending as a percentage of private health expenditure	79.9%	79.6%	78.2%	78.6%	78.2%

Source: World Bank's HNP Stats: Health expenditure 2000–2004 time series.

Governance indicators

	1996	1998	2000	2002	2003	2004	2005	2006
Corruption perception		3.3	3.5	3.9	3.3	3.6	3.5	3.3
Corruption control	–0.5	–0.3	–0.3	–0.4	–0.3	–0.3	–0.4	–0.1
Government effectiveness	–0.4	–0.2	0.0	–0.2	–0.2	–0.2	–0.1	0.1
Political stability	–0.2	–0.1	–0.2	–0.1	0.0	0.0	0.3	0.2
Regulation quality	0.2	0.0	0.0	–0.4	–0.3	–0.4	–0.1	–0.1
Rule of law	–0.4	–0.4	–0.1	–0.2	–0.2	–0.3	–0.2	–0.1
Voice and accountability	–0.2	–0.4	0.0	–0.1	0.2	0.0	0.3	0.4

Source: World Bank's Worldwide Governance Indicators: Governance 1996–2006 time series.

Business climate (Source: From the World Bank's Doing Business Project)
As the top reformer in Africa, Ghana reformed trade, tax, and property administration. It introduced a single-window clearance process at customs where traders can now file all paperwork—for all agencies—in one place. Clearance time dropped from seven days to three days for imports and from four days to two days for exports. Ghana also reduced the corporate tax rate and reconstruction levy for businesses, cutting the overall tax burden from 35.6 percent to 32.3 percent of profits. And it decreased the stamp duty on property transfers from 2 percent to 0.5 percent of the property value.

India

Facts (Source: BBC News online)

- **Population:** 1.1 billion (UN 2007)
- **Area:** 3.1 million sq km (1.2 million sq miles), excluding Indian-administered Kashmir (100,569 sq km/38,830 sq miles)
- **Major languages:** Hindi, English, and at least 16 other official languages
- **Major religions:** Hinduism, Islam, Christianity, Sikhism, Buddhism, Jainism
- **Life expectancy:** 63 years (men), 66 years (women) (UN)
- **Gross national income per capita:** US $720 (World Bank 2006)

Health expenditures

	2000	**2001**	**2002**	**2003**	**2004**
Total health expenditures per capita	$19	$21	$23	$27	$31
Total health expenditures as a percentage of gross domestic product	4.3%	4.5%	4.8%	4.9%	5.0%
External resources as a percentage of total health expenditures	0.7%	2.4%	0.3%	0.6%	0.5%
Private expenditure as a percentage of total health expenditures	79.1%	80.8%	82.2%	82.9%	82.7%
Out-of-pocket spending as a percentage of private health expenditure	92.1%	92.7%	93.3%	93.5%	93.8%

Source: World Bank's HNP Stats: Health expenditure 2000–2004 time series.

Governance indicators

	1996	**1998**	**2000**	**2002**	**2003**	**2004**	**2005**	**2006**
Corruption perception		2.9	2.8	2.7	2.8	2.8	2.9	3.3
Corruption control	–0.4	–0.3	–0.3	–0.4	–0.4	–0.4	–0.3	–0.2
Government effectiveness	–0.2	–0.2	–0.1	-–0.1	0.0	-–0.1	-–0.1	0.0
Political stability	-–1.1	-–0.8	-–0.7	-–1.0	-–1.2	-–0.9	-–0.8	-–0.8
Regulation quality	0.0	-–0.3	-–0.1	-–0.4	-–0.4	-–0.4	-–0.2	-–0.1
Rule of law	0.3	0.1	0.2	0.0	0.0	0.0	0.1	0.2
Voice and accountability	0.1	0.3	0.3	0.4	0.3	0.4	0.4	0.3

Source: World Bank's Worldwide Governance Indicators: Governance 1996–2006 time series.

Kenya

Facts (Source: From BBC News online)

- **Population:** 34.3 million (UN 2005)
- **Area:** 582,646 sq km (224,961 sq miles)
- **Major languages:** Swahili, English
- **Major religion:** Christianity
- **Life expectancy:** 48 years (men), 46 years (women) (UN)
- **Gross national income per capita:** US $540 (World Bank 2005)

Health expenditures

	2000	**2001**	**2002**	**2003**	**2004**
Total health expenditures per capita	$18	$18	$19	$20	$20
Total health expenditures as a percentage of gross domestic product	4.4%	4.3%	4.6%	4.4%	4.1%
External resources as a percentage of total health expenditures	8.5%	15.7%	16.4%	15.6%	18.3%
Private expenditure as a percentage of total health expenditures	53.0%	56.8%	56.0%	61.2%	57.3%
Out-of-pocket spending as a percentage of private health expenditure	80.1%	80.5%	80.0%	82.5%	81.9%

Source: World Bank's HNP Stats: Health expenditure 2000–2004 time series.

Governance indicators

	1996	1998	2000	2002	2003	2004	2005	2006
Corruption perception		2.5	2.1	1.9	1.9	2.1	2.1	2.2
Corruption control	–1.1	–1.1	–1.0	–1.0	–0.9	–0.8	–1.0	–1.0
Government effectiveness	–0.3	–0.7	–0.7	–0.8	–0.7	–0.7	–0.8	–0.7
Political stability	–0.7	–1.0	–1.1	–1.2	–1.3	–1.0	–1.2	–1.1
Regulation quality	–0.3	–0.5	–0.3	–0.2	–0.1	–0.2	–0.2	–0.2
Rule of law	–1.1	–1.1	–1.0	–1.0	–1.0	–1.0	–1.0	–1.0
Voice and accountability	–0.9	–0.9	–0.8	–0.7	–0.4	–0.3	–0.2	–0.2

Source: World Bank's Worldwide Governance Indicators: Governance 1996–2006 time series.

Business climate (Source: From the World Bank's Doing Business Project)
Kenya replaced its paper-based customs administration with an electronic data interface system. Traders can electronically submit their customs declarations and pay for customs duties online. Importing sped up by seven days as a result. Kenya also eliminated 26 licensing requirements for businesses, with a proposed cut of 92 more.

Kyrgyz Republic

Facts (Source: From BBC News online)

- **Population:** 5.3 million (UN 2007)
- **Area:** 199,900 sq km (77,182 sq miles)
- **Major languages:** Kyrgyz, Russian
- **Major religions:** Islam, Christianity
- **Life expectancy:** 62 years (men), 70 years (women) (UN)
- **Gross national income per capita:** US $440 (World Bank 2006)

Health expenditures

	2000	2001	2002	2003	2004
Total health expenditures per capita	$14	$16	$18	$21	$24
Total health expenditures as a percentage of gross domestic product	5.0%	5.1%	5.7%	5.7%	5.6%
External resources as a percentage of total health expenditures	8.6%	7.2%	14.1%	7.9%	15.1%
Private expenditure as a percentage of total health expenditures	51.9%	55.4%	58.1%	59.0%	59.1%
Out-of-pocket spending as a percentage of private health expenditure	89.3%	90.6%	91.0%	93.0%	94.3%

Source: World Bank's HNP Stats: Health expenditure 2000–2004 time series.

Governance indicators

	1996	1998	2000	2002	2003	2004	2005	2006
Corruption perception				2.2	2.1	2.2	2.3	2.2
Corruption control	–0.8	–0.7	–0.9	–0.9	–0.8	–1.0	–1.1	–1.1
Government effectiveness	–0.5	–0.3	–0.5	–0.6	–0.7	–0.7	–0.9	–0.9
Political stability	0.6	0.0	–0.5	–1.2	–1.3	–1.2	–1.1	–1.2
Regulation quality	–0.5	–0.5	–0.3	–0.2	–0.3	–0.2	–0.7	–0.6
Rule of law	–0.6	–0.7	–0.9	–0.8	–0.8	–0.8	–1.1	–1.2
Voice and accountability	–0.7	–0.7	–1.2	–1.0	–1.1	–1.0	–0.8	–0.7

Source: World Bank's Worldwide Governance Indicators: Governance 1996–2006 time series.

Laos (People's Democratic Republic of)

Facts (Source: From BBC News online)

- **Population:** 5.9 million (UN 2007)
- **Area:** 236,800 sq km (91,400 sq miles)
- **Major languages:** Lao, French (for diplomatic purposes)
- **Major religion:** Buddhism
- **Life expectancy:** 63 years (men), 66 years (women) (UN)
- **Gross national income per capita:** US $440 (World Bank 2006)

Health expenditures

	2000	2001	2002	2003	2004
Total health expenditures per capita	$11	$11	$11	$15	$17
Total health expenditures as a percentage of gross domestic product	3.2%	3.3%	3.3%	4.5%	3.9%
External resources as a percentage of total health expenditures	30.3%	12.6%	15.0%	19.6%	10.2%
Private expenditure as a percentage of total health expenditures	67.4%	66.4%	67.4%	69.8%	79.5%
Out-of-pocket spending as a percentage of private health expenditure	91.8%	91.1%	89.5%	92.5%	90.3%

Source: World Bank's HNP Stats: Health expenditure 2000–2004 time series.

Governance indicators

	1996	1998	2000	2002	2003	2004	2005	2006
Corruption perception				2.5	2.7	3.8	3.3	2.6
Corruption control	–1.0	–0.7	–0.9	–0.9	–1.0	–1.0	–1.1	–1.0
Government effectiveness	–0.1	–0.7	–0.8	–0.7	–1.0	–1.0	–1.1	–0.9
Political stability	1.0	–0.3	–0.7	–0.3	–1.0	–0.6	–0.3	–0.1
Regulation quality	–1.4	–1.2	–1.3	–1.3	–1.3	–1.2	–1.2	–1.1
Rule of law	–1.6	–0.9	–0.9	–1.1	–1.2	–1.0	–1.1	–0.9
Voice and accountability	–1.2	–1.1	–1.3	–1.6	–1.6	–1.4	–1.6	–1.6

Source: World Bank's Worldwide Governance Indicators: Governance 1996–2006 time series.

Malawi

Facts (Source: From BBC News online)

- **Population:** 13.9 million (UN 2007)
- **Area:** 118,484 sq km (45,747 sq miles)
- **Major languages:** English, Chichewa (both official)
- **Major religions:** Christianity, Islam
- **Life expectancy:** 48 years (men), 48 years (women) (UN)
- **Gross national income per capita:** US $160 (World Bank 2006)

Health expenditures

	2000	2001	2002	2003	2004
Total health expenditures per capita	$9	$11	$16	$18	$19
Total health expenditures as a percentage of gross domestic product	6.1%	7.8%	10.0%	12.8%	12.9%
External resources as a percentage of total health expenditures	26.9%	42.4%	44.4%	61.6%	59.4%
Private expenditure as a percentage of total health expenditures	56.1%	38.3%	26.9%	25.5%	25.3%
Out-of-pocket spending as a percentage of private health expenditure	42.4%	44.1%	44.4%	37.6%	35.2%

Source: World Bank's HNP Stats: Health expenditure 2000–2004 time series.

Governance indicators

	1996	1998	2000	2002	2003	2004	2005	2006
Corruption Perception		4.1	4.1	2.9	2.8	2.8	2.8	2.7
Corruption Control	–0.5	–0.4	–0.4	–0.9	–0.8	–0.8	–0.8	–0.7
Government Effectiveness	–0.7	–0.2	–0.4	–0.8	–0.7	–0.8	–0.8	–0.8
Political Stability	–0.3	–0.1	–0.6	–0.2	–0.2	–0.1	0.0	0.0
Regulation Quality	–0.2	0.0	–0.2	–0.5	–0.5	–0.5	–0.6	–0.6
Rule of Law	–0.6	–0.5	–0.5	–0.5	–0.4	–0.3	–0.3	–0.5
Voice and Accountability	0.0	–0.1	–0.1	–0.6	–0.5	–0.6	–0.5	–0.3

Source: World Bank's Worldwide Governance Indicators: Governance 1996–2006 time series.

Nigeria

Facts (Source: From BBC News online)

- **Population:** 148 million (UN 2007)
- **Area:** 923,768 sq km (356,669 sq miles)
- **Major languages:** English (official), Yoruba, Ibo, Hausa
- **Major religions:** Islam, Christianity, indigenous beliefs
- **Life expectancy:** 46 years (men), 47 years (women) (UN)
- **Gross national income per capita:** US $560 (World Bank 2006)

Health expenditures

	2000	2001	2002	2003	2004
Total health expenditures per capita	$18	$19	$19	$21	$23
Total health expenditures as a percentage of gross domestic product	4.3%	5.3%	5.0%	4.7%	4.6%
External resources as a percentage of total health expenditures	16.2%	5.6%	6.1%	4.5%	5.6%
Private expenditure as a percentage of total health expenditures	66.5%	68.6%	74.4%	72.8%	69.6%
Out-of-pocket spending as a percentage of private health expenditure	92.7%	91.4%	90.4%	90.4%	90.4%

Source: World Bank's HNP Stats: Health expenditure 2000–2004 time series.

Governance indicators

	1996	1998	2000	2002	2003	2004	2005	2006
Corruption perception		1.9	1.2	1.6	1.4	1.6	1.9	2.2
Corruption control	–1.2	–1.1	–1.1	–1.4	–1.2	–1.3	–1.2	–1.3
Government effectiveness	–1.4	–1.1	–1.0	–1.0	–0.8	–0.9	–0.9	–1.0
Political stability	–1.6	–0.8	–1.6	–1.7	–1.7	–1.8	–1.7	–2.0
Regulation quality	–1.1	–0.8	–0.7	–1.2	–1.1	–1.3	–0.9	–0.9
Rule of law	–1.4	–1.3	–1.2	–1.5	–1.7	–1.6	–1.4	–1.3
Voice and accountability	–1.8	–1.2	–0.7	–0.8	–0.8	–0.9	–0.8	–0.8

Source: World Bank's Worldwide Governance Indicators: Governance 1996–2006 time series.

Business climate (Source: From the World Bank's Doing Business Project)
Nigeria embarked on a large-scale court reform to improve court efficiency. The time to resolve simple commercial cases dropped from 730 days to 457, and now close to one-third are settled during pretrial conferences. When contracts are enforced more efficiently, businesses expand their trade networks, employ more workers, and have easier access to credit. Nigeria also cut registration time for property from 274 days to 80 days by placing time limits on government consent and digitizing records; it also updated customs clearance software, increasing information sharing among government units handling imports and exports. Import delays dropped eight days, and export delays dropped 16 days. A post-clearance audit system ensures that improvements to port operations will continue.

Rwanda

Facts (Source: From BBC News online)

- **Population:** 9.7 million (UN 2005)
- **Area:** 26,338 sq km (10,169 sq miles)
- **Major languages:** Kinyarwanda (official), French (official), English (official), Swahili
- **Major religions:** Christianity, indigenous beliefs
- **Life expectancy:** 45 years (men), 48 years (women) (UN)
- **Gross national income per capita:** US $230 (World Bank 2006)

Health expenditures

	2000	2001	2002	2003	2004
Total health expenditures per capita	$9	$8	$8	$13	$16
Total health expenditures as a percentage of gross domestic product	4.0%	3.9%	4.1%	7.0%	7.5%
External resources as a percentage of total health expenditures	52.0%	43.6%	32.8%	41.6%	37.1%
Private expenditure as a percentage of total health expenditures	60.8%	56.1%	48.7%	47.3%	43.2%
Out-of-pocket spending as a percentage of private health expenditure	40.7%	44.9%	49.8%	36.8%	36.9%

Source: World Bank's HNP Stats: Health expenditure 2000–2004 time series.

Governance indicators

	1996	1998	2000	2002	2003	2004	2005	2006
Corruption perception				5.2	3.5	3.5	3.1	2.5
Corruption control		–0.8	–0.7	–0.6	–0.7	–0.6	–0.7	–0.1
Government effectiveness	–1.2	–1.1	–0.8	–1.0	–0.9	–0.7	–1.0	–0.4
Political stability	–2.0	–2.2	–1.8	–1.8	–1.2	–0.9	–0.7	–0.5
Regulation quality	–1.7	–1.2	–1.0	–0.7	–0.7	–0.6	–0.8	–0.6
Rule of law	–1.5	–1.5	–1.3	–1.0	–0.9	–0.8	–0.9	–0.6
Voice and accountability	–1.4	–1.4	–1.5	–1.5	–1.2	–1.3	–1.2	–1.1

Source: World Bank's Worldwide Governance Indicators: Governance 1996–2006 time series.

Business climate (Source: From the World Bank's Doing Business Project)
Rwanda reorganized its court structure under a new constitution and introduced a specialized commercial division in the high court. To ease company start-up, a presidential decree increased authorized notaries from one (a legacy from King Leopold's colonial era) to 33, with 449 expected once implementation is complete. As a result, time to register a new business fell from 21 days to 16 days. Rwanda also decreased its corporate income tax rate from 35 percent to 30 percent in 2005.

Health sector reform (Source: World Bank 2008)
Since 2004, Rwanda has implemented an ambitious program of reforms to accelerate progress toward the Millennium Development Goals. The 2008 Demographic and Health Survey shows that these are bearing fruit. Improvements in coverage with high-impact interventions and health outcomes have been dramatic: between 2003 and 2008, the use of insecticide-treated bed nets increased from 4 percent to 65 percent, contraceptive prevalence increased from 7 percent to 28 percent, and assisted deliveries increased from 39 percent to 52 percent. Outcomes are also improving: malaria incidence has decreased by 60 percent, and malaria mortality by 50 percent. HIV prevalence is on the decline. Under-five mortality has decreased dramatically, and Rwanda is generally back on track for the health Millennium Development Goals.

These results were achieved thanks to broad reforms in the public sector including performance-based planning, autonomization of public providers, and institutionalization and scaling-up of contracting of all health facilities in the country, about half of which are private clinics. Fiscal decentralization was implemented with performance-based budgeting using an innovative performance contract (IMIHIGO) between the mayors and the president of the country to govern formula-based intergovernmental transfers. Hiring and wage authority has also been devolved to the health facilities; health workers are now delinked from the central civil service. Finally, health insurance has been scaled up and enrollment increased from 7 percent to 70 percent of the population. The government intends to consolidate and expand reforms, particularly through the implementation of an enhanced community health program, the introduction of conditional cash transfers, and the training of a new cadres of health workers to serve in rural villages.

Tanzania

Facts (Source: From BBC News online)

- **Population:** 40.4 million (UN 2007)
- **Area:** 945,087 sq km (364,900 sq miles)
- **Major languages:** English, Swahili
- **Major religions:** Christianity, Islam
- **Life expectancy:** 51 years (men), 54 years (women) (UN)
- **Gross national income per capita:** US $340 (World Bank 2006)

Health expenditures

	2000	2001	2002	2003	2004
Total health expenditures per capita	$11	$11	$10	$11	$12
Total health expenditures as a percentage of gross domestic product	4.1%	4.1%	3.9%	3.8%	4.0%
External resources as a percentage of total health expenditures	27.8%	19.1%	11.4%	24.2%	27.1%
Private expenditure as a percentage of total health expenditures	56.1%	56.7%	56.1%	57.7%	56.4%
Out-of-pocket spending as a percentage of private health expenditure	83.3%	83.4%	82.9%	83.0%	83.2%

Source: World Bank's HNP Stats: Health expenditure 2000–2004 time series.

Governance indicators

	1996	1998	2000	2002	2003	2004	2005	2006
Corruption perception		1.9	2.5	2.7	2.5	2.8	2.9	2.9
Corruption control	–1.1	–1.1	–1.1	–1.0	–0.9	–0.6	–0.7	–0.4
Government effectiveness	–0.8	–0.5	–0.4	–0.4	–0.3	–0.4	–0.3	–0.3
Political stability	–0.3	–0.1	–0.5	–0.2	–0.5	–0.4	–0.4	–0.2
Regulation quality	0.0	–0.2	–0.2	–0.5	–0.4	–0.4	–0.5	–0.4
Rule of law	–0.4	–0.4	–0.5	–0.5	–0.4	–0.5	–0.4	–0.5
Voice and accountability	–0.7	–0.5	–0.4	–0.3	–0.4	–0.5	–0.3	–0.3

Source: World Bank's Worldwide Governance Indicators: Governance 1996–2006 time series.

Business climate (Source: From the World Bank's Doing Business Project)
As the tenth-ranked reformer worldwide, Tanzania reduced the cost to register new businesses by 40 percent through a reduction in licensing requirements. It introduced a new electronic customs clearance system and implemented risk-based inspections of cargo to cut turnaround time. Customs clearance times dropped from 51 to 39 days for imports and 30 to 24 days for exports. Tanzania also cut fees associated with transferring property by 3 percent and revised its company law to better protect small investors.

Thailand

Facts (Source: From BBC News online)

- **Population:** 64 million (UN 2007)
- **Area:** 513,115 sq km (198,115 sq miles)
- **Major language:** Thai
- **Major religion:** Buddhism
- **Life expectancy:** 66 years (men), 75 years (women) (UN 2007)
- **Gross national income per capita:** US $2,750 (World Bank 2006)

Health expenditures

	2000	2001	2002	2003	2004
Total health expenditures per capita	$68	$62	$75	$80	$88
Total health expenditures as a percentage of gross domestic product	3.4%	3.3%	3.7%	3.5%	3.5%
External resources as a percentage of total health expenditures	0.0%	0.1%	0.3%	0.3%	0.3%
Private expenditure as a percentage of total health expenditures	43.9%	43.6%	36.5%	36.3%	35.3%
Out-of-pocket spending as a percentage of private health expenditure	76.9%	75.8%	74.8%	74.5%	74.7%

Source: World Bank's HNP Stats: Health expenditure 2000–2004 time series.

Governance indicators

	1996	1998	2000	2002	2003	2004	2005	2006
Corruption perception		3.0	3.2	3.2	3.3	3.6	3.8	3.6
Corruption control	–0.4	–0.2	–0.1	–0.3	–0.4	–0.3	–0.2	–0.3
Government effectiveness	0.4	0.1	0.1	0.2	0.2	0.3	0.4	0.3
Political stability	0.0	0.4	0.4	0.3	–0.1	–0.5	–0.6	–1.0
Regulation quality	0.6	0.3	0.5	0.2	0.3	0.1	0.4	0.4
Rule of law	0.5	0.4	0.4	0.2	0.1	0.0	0.1	0.0
Voice and accountability	0.3	0.4	0.5	0.4	0.3	0.2	0.0	–0.5

Source: World Bank's Worldwide Governance Indicators: Governance 1996–2006 time series.

Uganda

Facts (Source: From BBC News online)

- **Population:** 30.9 million (UN 2007)
- **Area:** 241,038 sq km (93,072 sq miles)
- **Major languages:** English (official), Swahili (official), Luganda, various Bantu languages
- **Major religions:** Christianity, Islam
- **Life expectancy:** 51 years (men), 52 years (women) (UN)
- **Gross national income per capita:** US $280 (World Bank 2006)

Health expenditures

	2000	2001	2002	2003	2004
Total health expenditures per capita	$16	$17	$18	$18	$19
Total health expenditures as a percentage of gross domestic product	6.6%	7.3%	7.6%	7.3%	7.6%
External resources as a percentage of total health expenditures	28.3%	27.4%	21.1%	24.5%	25.2%
Private expenditure as a percentage of total health expenditures	73.2%	72.7%	68.9%	69.6%	67.3%
Out-of-pocket spending as a percentage of private health expenditure	56.7%	51.8%	51.0%	52.8%	51.3%

Source: World Bank's HNP Stats: Health expenditure 2000–2004 time series.

Governance indicators

	1996	1998	2000	2002	2003	2004	2005	2006
Corruption perception		2.6	2.3	2.1	2.2	2.6	2.5	2.7
Corruption control	–0.5	–0.9	–1.0	–1.0	–0.8	–0.8	–0.9	–0.7
Government effectiveness	–0.6	–0.5	–0.4	–0.5	–0.4	–0.4	–0.5	–0.5
Political stability	–1.3	–1.3	–1.5	–1.7	–1.5	–1.4	–1.4	–1.2
Regulation quality	0.3	0.2	0.0	0.0	–0.1	–0.1	0.1	–0.2
Rule of law	–0.6	–0.6	–0.8	–0.7	–0.6	–0.8	–0.7	–0.5
Voice and accountability	–0.6	–0.8	–1.2	–1.0	–0.8	–0.8	–0.6	–0.5

Source: World Bank's Worldwide Governance Indicators: Governance 1996–2006 time series.

Business climate (Source: From the World Bank's Doing Business Project)
Uganda eased registration requirements for new companies, making it easier for them to operate in the formal sector and facilitating their access to credit, allowing them to grow.

Vietnam

Facts (Source: From BBC News online)

- **Population:** 87.4 million (UN 2007)
- **Area:** 329,247 sq km (127,123 sq miles)
- **Major language:** Vietnamese
- **Major religion:** Buddhism
- **Life expectancy:** 72 years (men), 76 years (women) (UN)
- **Gross national income per capita:** US $620 (World Bank 2006)

Health expenditures

	2000	2001	2002	2003	2004
Total health expenditures per capita	$21	$23	$22	$25	$30
Total health expenditures as a percentage of gross domestic product	5.3%	5.5%	5.1%	5.2%	5.5%
External resources as a percentage of total health expenditures	2.7%	2.8%	3.5%	2.8%	2.0%
Private expenditure as a percentage of total health expenditures	72.0%	70.8%	71.9%	70.9%	72.9%
Out-of-pocket spending as a percentage of private health expenditure	87.1%	89.6%	87.7%	86.5%	88.0%

Source: World Bank's HNP Stats: Health expenditure 2000–2004 time series.

Governance indicators

	1996	1998	2000	2002	2003	2004	2005	2006
Corruption perception		2.5	2.5	2.4	2.4	2.6	2.6	2.6
Corruption control	–0.7	–0.6	–0.7	–0.7	–0.6	–0.8	–0.8	–0.7
Government effectiveness	–0.2	–0.5	–0.4	–0.4	–0.3	–0.4	–0.3	–0.4
Political stability	0.3	0.4	0.3	0.3	0.2	0.2	0.4	0.4
Regulation quality	–0.2	–0.3	–0.6	–0.7	–0.6	–0.5	–0.6	–0.5
Rule of law	–0.6	–0.5	–0.5	–0.6	–0.6	–0.5	–0.4	–0.4
Voice and accountability	–1.6	–1.4	–1.3	–1.4	–1.5	–1.3	–1.4	–1.5

Source: World Bank's Worldwide Governance Indicators: Governance 1996–2006 time series.

Zambia

Facts (Source: From BBC News online)

- **Population:** 11.9 million (UN 2007)
- **Area:** 752,614 sq km (290,586 sq miles)
- **Major language:** English (official), Bemba, Lozi, Nyanja, Tonga
- **Major religions:** Christianity, indigenous beliefs, Hinduism, Islam
- **Life expectancy:** 42 years (men), 42 years (women) (UN)
- **Gross national income per capita:** US $490 (World Bank 2006)

Health expenditures

	2000	**2001**	**2002**	**2003**	**2004**
Total health expenditures per capita	$17	$19	$21	$24	$30
Total health expenditures as a percentage of gross domestic product	5.7%	5.6%	6.4%	6.2%	6.3%
External resources as a percentage of total health expenditures	17.8%	14.1%	27.2%	34.1%	36.3%
Private expenditure as a percentage of total health expenditures	48.7%	45.3%	37.8%	41.0%	45.3%
Out-of-pocket spending as a percentage of private health expenditure	80.5%	74.3%	77.0%	75.5%	71.4%

Source: World Bank's HNP Stats: Health expenditure 2000–2004 time series.

Governance indicators

	1996	**1998**	**2000**	**2002**	**2003**	**2004**	**2005**	**2006**
Corruption perception		3.5	3.4	2.6	2.5	2.6	2.6	2.6
Corruption control	–1.0	–0.9	–0.9	–1.0	–0.8	–0.9	–0.8	–0.8
Government effectiveness	–0.6	–1.0	–1.0	–0.8	–0.8	–0.9	–0.9	–0.7
Political stability	–0.5	–0.1	–0.4	–0.3	–0.1	0.1	0.0	0.3
Regulation quality	0.4	0.4	–0.2	–0.6	–0.6	–0.6	–0.6	–0.6
Rule of law	–0.6	–0.6	–0.6	–0.5	–0.6	–0.6	–0.6	–0.6
Voice and accountability	–0.5	–0.5	–0.4	–0.4	–0.3	–0.4	–0.5	–0.3

Source: World Bank's Worldwide Governance Indicators: Governance 1996–2006 time series.