

Removing Impediments to Sustainable Economic Development: The Case of Corruption

Augusto López Claros Director Global Indicators Group, World Bank Group alopezclaros@ifc.org

Published 7 January 2015

This paper examines causes and consequences of corruption within the process of economic development. Drawing on experiences and insights accumulated during the post-war period and reflected in a growing body of academic research, the paper analyzes institutional mechanisms that sustain corruption and the impact of corruption on development. It argues that many forms of corruption stem from the distributional attributes of the state in its role as the economy's central agent of resource allocation. It also addresses the question of what can be done about corruption and discusses the role of economic policies in developing incentives and institutions to reduce its incidence.

Keywords: Corruption; development; policies; economic growth.

JEL Classification: D73.

1. Introduction

The past 20 years or so have witnessed a remarkable shift in our understanding of what matters in creating the conditions for sustainable economic growth and development. The economics profession has broadened its focus as we have come to better comprehend the role of such factors as education and skills, institutions, property rights, technology, transparency, and accountability. On the whole, this broader outlook has been beneficial, bringing an implicit recognition that promoting inclusive growth is a multi-dimensional undertaking that requires addressing an expanding set of nontraditional concerns.

This paper deals with one of these concerns. It examines the role of corruption and its multifaceted interactions with the process of economic development. Section 2 provides some working definitions of corruption and explores some of its principal sources. It argues that many forms of corruption stem from the distributional attributes of the state in its role as the economy's central agent of resource allocation. Section 3 examines the effect of corruption on development, drawing on a vast trove of experiences and insights accumulated during the postwar period and reflected in a growing body of academic research. It looks at the impact of corruption on public

A. López Claros

finances and on the speed and characteristics of private sector development. And it examines the distortions that corruption introduces in the allocation of resources and the insidious ways in which it vitiates the relationships among economic agents in the marketplace. Section 4 addresses the question of what can be done about corruption and discusses the role of economic policies in creating an environment that provides the right sorts of incentives and institutions to reduce its incidence. Particular attention is paid to business regulations, subsidies, the budget process, international conventions and the role of new technologies. The conclusion offers some thoughts on the moral dimensions of corruption.

2. Corruption and its Sources

It was not so long ago that formal discussion about corruption at international financial institutions such as the International Monetary Fund and the World Bank was a taboo. The subject was not mentioned in policy papers prepared by the staff of either organization or at meetings of the Executive Board and it was not alluded to in the context of the intense policy dialogue between the staffs of either institutions and country authorities. Though it would have been impossible not to notice that corruption was rampant in many parts of the world, there was a conscious choice to sidestep the issue, considering it a form of interference in domestic politics, something that neither organization was willing to do.

Sometime in the late 1980s and early 1990s there was a shift in thinking within the development community and at the international financial institutions about the role of corruption in the development process.¹ The shift was tentative at first, with increasing references in the speeches of the heads of both organizations to the role of "good governance" in encouraging successful development. It is perhaps not possible to pinpoint a single factor which may have precipitated a change of heart and a growing recognition of the role of institutional and other factors — beyond economic stabilization — in promoting economic growth and development. One that comes to mind stems from the falling of the Berlin Wall and the associated collapse of central planning as a supposedly viable alternative to free market capitalism. It was obvious that it was not inappropriate monetary policies that led to the collapse of central planning but rather widespread institutional failings, including a lethal mix of authoritarianism (therefore, lack of accountability) and corruption.

The collapse of central planning in the late 1980s and the need for the international community to assist these countries in making a successful transition to democratic forms of governance and economies based on market principles made it glaringly clear that it would take far more to do so than "getting inflation right" or reducing the budget deficit. Literally overnight, the economics profession was forced to confront a much broader set of issues beyond conventional macroeconomic policy.

¹ For a review of the role of international institutions in anti-corruption policy, see Rose-Ackerman (2011).

A second factor which had the same effect was growing frustration with the plight of people in Africa and other parts of the developing world. Gains in the global fight against poverty had begun to bear some fruit but these were largely concentrated in China, with Africa actually seeing further increases in the number of poor.

A third factor surely had to do with developments in the academic community. In particular, research on the importance of property rights, education and training, and institutions, including some empirical work which began to suggest that differences in institutions appeared to explain an important share of the growth differential between countries, and therefore have an influence upon countries' growth performance, well beyond simply getting inflation right or addressing other macroeconomic weaknesses. It is no exaggeration to say that in respectable academic circles, corruption began to be seen as an *economic* issue and this led to a better understanding of the economic effects of corruption, a topic to which we will turn our attention shortly.

In parallel to these developments and further raising international public awareness of corruption, the 1990s witnessed a large number of scandals involving major political figures in some form of bribery or corruption. In India and Pakistan, the prime ministers were defeated largely because they were dogged by corruption charges. In South Korea, two presidents were jailed following disclosures of bribery, while in Brazil and Venezuela bribery charges resulted in the presidents being impeached and removed from office. The president in Colombia survived impeachment but his reputation was tarnished as a result of campaign financial contributions from a drug cartel and his party lost the next election; the president of Ecuador was less fortunate, forced to quit and leave the country under a cloud of scandal. The credibility of the president of Mexico suffered, when it was revealed that his brother had accumulated vast sums in questionable dealings. In Italy, Italian magistrates sent to jail a not insignificant number of the political class, who had ruled the country in the post-war period, and exposed the vast web of bribery that had bound together political parties and members of the business community. There was less progress in Africa but, without question, corruption became harder to hide and the new technologies of communication proved a useful ally of increasing openness and transparency.

Also contributing to this shift in attitude was the work of Transparency International (TI) and the publication, beginning in 1993, of its now well-known *Corruption Perceptions Index* (CPI). That corruption existed everywhere was a well-known fact. What TI showed was that some countries had been more successful than others in curtailing it and that it was possible to build a simple index that would attach a corruption score to each country. The work of TI, including the formulation of anticorruption initiatives in such areas as public procurement, conflict of interest, and freedom of information laws, as well as the formation of an extended network of national chapters in more than a hundred countries, helped greatly to focus public attention on the issue of corruption. Many governments disliked the CPI and severely criticized it, a sure sign of its effectiveness. TI contributed to legitimizing public discourse on issues of corruption and

thus eased the transition by the multilateral organizations into doing the same. At the same time, the introduction of the World Bank's Governance Indicators shifted the nature of the debate on corruption, from abstract (and necessarily controversial) discussions about the widespread incidence of corruption in, say, Kenya's public sector, to evidence-based analysis of internationally comparable composite indicators drawn from a large number of credible sources (see Table 1).

More important, economists began to broaden the debate as to the elements of a more integrated approach to economic development, one that went beyond the narrow confines of macroeconomic stabilization and an overwhelming focus, in the case of the IMF, on inflation and the budget deficit.

For the reasons outlined above, the 1990s saw the appearance of a large number of academic studies examining different dimensions of corruption — its causes, its impact and the institutional mechanisms that sustain it — often with a particular focus on the developing world, where its costs were assumed to be highest. In addition, the greater willingness of the international financial organizations to look at corruption in the context of their overall mandate for promoting economic development led to a substantial body of knowledge based on on-the-ground experience. It will be useful to briefly review what we have learned about the sources of corruption in the past 30 years or so.

2.1. Defining corruption

What do we mean by corruption? For many development practitioners, the term has generally meant the abuse of public office for private gain. Shleifer and Vishny (1993, p. 599) defined *government corruption* as "the sale by government officials of government property for personal gain." Leff (1964, p. 417), a Harvard researcher who wrote one of the earliest academic studies on corruption — at a time when the issue was not on the radar screen of the International Monetary Fund (IMF), the World Bank or bilateral donors — said that "corruption is an extra-legal institution used by individuals or groups to gain influence over the actions of the bureaucracy".² Nye (1967, p. 418) said that corruption is "behavior which deviates from the formal duties of a public role because of private-regarding (personal, close family, private clique) pecuniary or status gains" and includes bribery, nepotism and misappropriation.

In a review of the literature on corruption, Bardhan (1997, p. 1321) said that "corruption ordinarily refers to the use of public office for private gains, where an official (the agent) entrusted with carrying out a task by the public (the principal) engages in some sort of malfeasance for private enrichment which is difficult to monitor for the principal." Klitgaard (1988, p. 22) drew on the principal/agent formulation to say that corrupt behavior occurs when "the agent is betraying her role as a

²Leff's paper, "Economic Development through Bureaucratic Corruption," published in 1964 in American Behavioral Scientist, was fairly controversial in tone and content. Some of its claims are examined in this paper.

Country	2000 Point estimate	2000 Percentile rank	2013 Point estimate	2013 Percentile rank	Corruption perception index 2014	
					Score	Ranking
Denmark	2.52	100	2.39	100	90	1
New Zealand	2.36	99	2.32	100	90	1
Sweden	2.40	99	2.31	99	88	4
Norway	2.29	97	2.24	99	85	7
Finland	2.59	100	2.22	98	90	1
Switzerland	2.21	95	2.15	98	86	6
Singapore	2.29	97	2.15	97	87	5
Australia	1.96	94	2.00	96	85	7
Canada	2.23	96	1.92	95	84	9
Germany	1.90	93	1.78	94	79	13
United Kingdom	2.24	96	1.64	92	74	17
Japan	1.23	86	1.61	92	74	17
Chile	1.54	92	1.56	91	72	20
United States	1.66	93	1.38	89	73	19
Spain	1.33	87	1.05	82	65	30
Estonia	0.65	75	0.98	80	64	32
Taiwan	0.75	78	0.72	74	61	37
Poland	0.55	72	0.59	72	58	41
Korea	0.25	65	0.47	70	56	45
Lithuania	0.19	64	0.31	66	54	48
Hungary	0.69	76	0.28	65	55	46
Czech Republic	0.08	62	0.23	64	49	54
Turkey	-0.33	47	0.17	63	49	54
Latvia	-0.29	48	0.15	63	49	54
Italy	0.72	77	-0.03	58	42	72
Brazil	0.02	60	-0.07	56	43	69
South Africa	0.61	73	-0.15	54	43	69
Bulgaria	-0.21	52	-0.24	52	41	75
Zambia	-0.85	21	-0.36	46	37	88
Mexico	-0.24	51	-0.41	43	34	105
China	-0.24	51	-0.48	39	39	80
Argentina	-0.34	47	-0.49	39	35	102
Algeria	-0.95	14	-0.54	36	34	105
India	-0.37	46	-0.57	35	36	94
Egypt	-0.39	44	-0.57	34	32	118
Ethiopia	-0.49	38	-0.60	32	33	113
Indonesia	-0.89	19	-0.66	29	32	118
Iran	-0.57	32	-0.82	24	28	133
Uganda	-0.85	21	-0.95	18	29	130
Russia	-0.92	17	-1.01	16	28	133
Ukraine	-1.07	8	-1.03	16	26	144

Table 1. World Bank: Control of corruption for selected countries 2000 and 2013.

Country	2000 Point estimate	2000 Percentile rank	2013 Point estimate	2013 Percentile rank	Corruption perception index 2014	
					Score	Ranking
Pakistan	-0.82	22	-1.06	14	27	139
Kenya	-0.95	14	-1.10	12	27	139
Nigeria	-1.13	6	-1.13	11	27	139
Venezuela	-0.53	35	-1.24	7	19	165
Angola	-1.52	2	-1.29	5	22	157
Congo, Dem. Rep	-1.57	1	-1.30	4	21	160

Table 1. (Continued)

Source: Governance Matters (2014)

public servant for her own private interests." Banfield (1975, p. 587) established an interesting distinction between *personal corruption*, in which the agent "sacrifices his principal's interest to his own, that is, he betrays his trust," and *official corruption*, in which the agent violates a law and "acts illegally or unethically albeit in his principal's interest." More recently, Banerjee *et al.* (2012) adopted the principal/agent formulation to develop a new theoretical framework for analyzing corruption. In their model, corruption is a consequence of the interactions between the task being performed by the bureaucrat, his or her private incentives and what the principal can observe and control.

Kaufmann (2005) makes a strong case for a broader definition of corruption, one not necessarily restricted to illegal acts involving the public sector. In his view, corruption generally involves collusion between two or more parties, at least one of which operates in the private sector, as when a transnational company pays bribes to the president of an African country to obtain an oil concession. Furthermore, some forms of corruption may be legal in some countries, such as when certain mechanisms of political party funding are artfully used to influence the shaping of policies and institutions in ways that benefit the contributing private parties at the expense of the broader public welfare — a process akin to the "privatization of public policy." Such instances of undue influence may not involve the payment of bribes but, on the whole, are conceptually indistinguishable from more conventional forms of corruption involving the abuse of public power for private benefit.

The public sector bias in the conventional definitions of corruption may reflect the sense that corruption is more damaging in developing countries, where the claims on scarce resources are more pressing — these countries often have high levels of poverty and many unmet social needs, including weak institutions — and where the evidence suggests that the government often bears the primary responsibility for the prevalence of corruption. As an example, an empirical study by Bhattacharyya and Hodler (2010) shows that higher rents from natural resources lead to a higher level of corruption, but only if the quality of democratic institutions is relatively poor.

2.2. The state as regulator and rationing agent

Economists seem to agree that an important source of corruption stems from the distributional attributes of the state. For better or for worse, the role of the state in the economy has greatly expanded over the past century, and this has led to a proliferation of benefits under state control and of the ways in which the state imposes costs on civil society and the business community. A large state need not be associated with higher levels of corruption — the Nordic countries have the highest levels of public spending but are also the least corrupt. But at least in principle, the larger the number of interactions between officials and private citizens, the more opportunities there are for citizens to illegally pay for benefits to which they are not entitled or to avoid costs or obligations for which they are responsible. A recent empirical paper by Fan *et al.* (2009), using survey data from 80 countries, provides evidence that firms are more likely to report bribery in countries with more tiers of government or with a larger number of local government employees.

In countries where the state is involved in the distribution of social benefits, but in ways that are not transparent and that may involve corruption, the distribution will not be equitable and poor people — less able to pay bribes — will be at a disadvantage. In such cases, the intent of social policy will be distorted and, if the problem is serious enough, perverted.

Governing often translates into issuing licenses and permits. From the cradle to the grave, the typical citizen has to enter into transactions with government offices or bureaucrats for countless reasons — to obtain a birth certificate, get a passport, pay taxes, open a new business, drive a car, register property, engage in foreign trade, sell a good or service to the government, hire an employee, use publicly provided health services, build a house. The World Bank's *Doing Business* report has become an excellent annual compendium of the burdens of business regulation in 189 countries. For many of them, the picture that emerges from the report is not a pleasant one.³ In Equatorial Guinea, for instance, it takes 18 procedures to start a new business and an average of 135 days to complete them. In Bangladesh, it takes 1442 days to enforce a contract through the courts, and in Greece, 1580. In Argentina, it takes 21 procedures and 341 days to deal with the formalities to build a warehouse. In fact, the data in the report eloquently portray the extent to which many governments *discourage* the development of entrepreneurship in the private sector.

The sobering irony is that the countries with the greatest need for entrepreneurship and private sector development are generally those that create the greatest obstacles to the creation of new enterprises or that otherwise intervene in ways that retard the emergence of the entrepreneurial capacities so central to innovation. Not surprisingly, the prevalence of corruption is highly correlated with the incidence of red tape and excessive regulation. Figure 1 shows the rankings of 175 countries on Transparency

³The Doing Business report is available free of charge on the World Bank's website at http://www.doingbusiness.org.



Figure 1. Rankings of 173 countries on the Corruption Perceptions Index and Ease of Doing Business Index, 2014.

Sources: Transparency International data; World Bank, *Doing Business 2015* (Washington, DC: World Bank, 2014).

International's Corruption Perceptions Index and on the *Doing Business* report's Ease of Doing Business Index. The figure speaks for itself: the greater the extent of bureaucracy and red tape, the greater the incidence of corruption — the correlation coefficient is close to 0.80.

As many surveys have shown, businesses allocate considerable time and resources to dealing with red tape. They may often perceive paying bribes as a way to save time and enhance efficiency and, in many countries, as possibly the only way to get business done without undermining their competitive position relative to those that routinely pay bribes. The more dysfunctional the economic and legal system and the more onerous the regulations, the greater the incentives to short-circuit the system by paying bribes. Leff (1964) made this point in a number of ways, expanding the argument beyond cumbersome regulations to damaging policies. He cited the example of Brazil and Chile, where poor harvests in the early 1960s resulted in upward pressures on food prices. Both governments decided to freeze food prices, ordering their bureaucracy to enforce price controls. In Chile, a reasonably honest bureaucracy was quite successful in maintaining the price controls, with a correspondingly adverse effect on food supplies. In contrast, in Brazil, a combination of inefficiency and bribery was very effective in sabotaging the price controls, but the result was increased food production. Or, as Leff put it, "we see the success of entrepreneurs and corrupted officials in producing a more effective policy than the government" (p. 12). Nye (1967, p. 420) provides similar examples, including the absurdities of central planning in the Soviet Union, which induced "corruption" by factory managers to add a degree of flexibility to a system that made a mockery of efficiency in resource allocation.

In East Africa, active discrimination forced Asian minorities to find accommodation with their oppressors through bribery and corruption. Leff (1964) argued that those who viewed corruption as an unremittingly bad thing were implicitly assuming that governments had benevolent motivations and were committed to implementing policies that advanced the cause of economic development. In reality, Leff thought, policies in many countries were geared largely to advancing the interests of the ruling elite. Carried away by his arguments, he questioned whether, for instance, the internal revenue bureaucracy should be unduly criticized for unenthusiastic tax collection efforts if the government was not particularly committed to economic development but showed a weakness for, say, new jets for the air force. In such a case, "the money saved from the tax collector may be a gain rather than a loss for development" (p. 12).⁴ Without stating so explicitly, Leff and somewhat later, Nye (1967) seemed to be suggesting that corruption was a response to market distortions, red tape, excessive and unreasonable regulation and bad policies but that these were themselves affected by the prevailing levels of corruption — in a symbiotic two-way form of causality that turned corruption into an intractable social and economic problem. Reading these two early papers, one is tempted to ask: How does a reform-minded government get started? This is a question to which we turn shortly. While it is clear that bribery and corruption may in some cases be responses to distortions in the economy, we will see that far from enhancing efficiency, they generally impose heavy costs on society, across a broad range of fronts.

Tanzi (1998) argues that the tax system itself is often a source of corruption, particularly where tax laws are unclear or otherwise difficult to understand. This lack of clarity presumably gives tax inspectors and auditors considerable leeway in interpretation, allowing unwholesome "compromises" with taxpayers. Features of government organization and policy produce incentives for corrupt behavior in numerous ways. As noted, the provision of goods and services at below-market prices creates fertile ground for corruption. It invariably gives rise to some form of rationing mechanism to manage excess demand, requiring the exercise of discretion by government officials. A clear example of this comes from the Soviet policy legacy that Russia was dealing with at the beginning of its transition to a market economy. The Soviet Union had operated

⁴Noonan (1984) relates the story of the philosopher Ludwig Wittgenstein, who, while living in England, learned that Germany's annexation of Austria would mean that his two sisters living in Vienna would be subject to the Nazi laws on race. Wittgenstein traveled to Germany and arranged for the Nazi authorities to leave his sisters alone in exchange for the payment of a sum of money, deposited at the Reichsbank, from the family fortune in Switzerland. Noonan argues that "when you have a right to a civil good — property, fair treatment, peace — you have a right to prevent its unjust denial. To use effective and necessary means of securing the right is not unjust. These means include an exchange with the power holder who is unjustly denying you your due." Noonan adds that when conditions in society have deteriorated to such an extent that they approach warfare against the oppressed — the Germany into which Wittgenstein made his appearance — then it is justified to "buy back harassment" (*redimerevexationem*). However, "the existence of exceptions does not disprove a moral value. The exception is admissible only when the social order and attendant trust are seriously impaired" (p. 646).

A. López Claros

under a highly complex system of multiple exchange rates, and the IMF, in early 1992, was assisting the government in unifying these rates. At a meeting at the Central Bank of Russia in the spring of 1992, IMF staff were shown an annex of several pages listing the exchange rates that applied for importing different items, from medications and baby carriages to luxury cars. Bureaucrats had managed to come up with criteria for establishing dozens of prices for foreign exchange, depending on the item to be imported. Needless to say, the list allowed considerable latitude for interpretation and discretion.⁵

A similar system existed for export quotas, for which licenses were required. Since the difference between the export price and the domestic price was often enormous (a ratio of 50 to 1 was not unusual), securing an export license was a key to vast riches and indeed, fortunes were made during this period, sometimes by government officials who found the system too tempting to scrap. The IMF pressed hard for the elimination of these quotas, and the meetings where the issue was raised were often hostile. It was obvious that powerful vested interests would hold out as long as possible, and indeed, it took two years to begin to remove the quotas. Another legacy of the Soviet Union was a system of directed credits, essentially highly subsidized loans to agriculture and industry. At rates of interest that were absurdly negative in real terms, these credits were in strong demand and, of course, the criteria for allocating them was extremely opaque.

The incentives for bribes provided in such examples are easy to see; the resulting losses in economic efficiency are similarly evident. Directed credits in Russia did not end up with farmers who might have helped boost food production. Instead, they ended up with the highest bidder, who then used the proceeds to buy foreign exchange and finance capital flight (while never repaying the credits or doing so only in deeply depreciated rubles). Export quotas resulted in massive losses for the Russian budget, at a time when the country was going through a severe economic contraction and there therefore enormous pressures for increased social spending. Rosewere Ackerman (1998), one of the leading experts on corruption, refers to the kind of bribery in these examples as bribes that clear the market or that equate supply and demand.

2.3. The temptations in privatization

Rose-Ackerman (1997b) highlights the ample opportunities for corruption provided by efforts, over the past two decades, to divest public assets. Interested parties may pay bribes to be included in lists of those authorized to bid. Appropriately valuing the

⁵ With considerable trepidation, the Russian authorities did abandon the system of multiple exchange rates. In July 1992, they moved to a system based on a single market-determined exchange rate, possibly one of the more important reforms introduced during the first year of Russia's transition to a market economy.

companies selected for privatization may often be difficult. This was particularly so in Eastern Europe and the former Soviet Union because the privatization process coincided with periods of macroeconomic instability, with exchange rates under pressure, inflation high and relative prices subject to great volatility. This gave officials considerable discretion. In addition, insider dealing may be poorly regulated. In Argentina, "several officials who designed the highway privatization bidding process were on the staff of companies that acquired the highways" (Rose-Ackerman, 1997b, p. 54).

With the intent to favor a particular bidder, officials may deliberately misstate a company's true financial situation, making it look weaker than suggested by the real data. Insiders, however, aware of the company's true finances, will make a higher bid and prevail. Later on, the privatization will be judged a great success because the (real) finances will look excellent compared with the false figures presented before the auction. Bidders for public utilities will have great incentive to bribe officials to preserve the monopoly status of the privatized enterprises. More generally, because the value of assets being privatized can be very large (sometimes amounting to several percentage points of GDP), the temptation for illicit profits will be great and considerable creativity will be exerted to capture a share of the rents.

2.4. Bribes for every taste

Rose-Ackerman (1998) provides a useful classification of different kinds of bribery. Some bribes are offered as incentive payments for bureaucrats. These can take a variety of forms. One is "speed money," ubiquitous in many parts of the world and typically used to "facilitate" a transaction or to jump the queue. Some economists have argued that this kind of bribery could improve efficiency, since it provides incentives to work more quickly and allows those who value their time highly to move faster. Myrdal (1968), however, pointed out that, over time, incentives could work the other way: bureaucrats may deliberately slow things down or, worse, find imaginary obstacles or create new ones in order to attract facilitation fees. So, in the end, "speed money" is paid not to speed things up but to avoid artificial delays created by corrupt bureaucrats. Indeed, some of the regulations enforced in many parts of the world are so devoid of rationality that one can only infer that they were introduced to create opportunities for bribery. Far from being a way to enhance efficiency, paying bribes is a way to preserve and strengthen the bribery machinery.

Other bribes are aimed at lowering costs. Typical examples are payoffs to tax officials to reduce tax liabilities or those to customs officials so that goods can clear customs more rapidly, more cheaply or without intrusive inspections. Kaufmann (2005), using survey data collected by the World Economic Forum, showed that OECD firms operating in other OECD countries tend to behave more or less as they would in their home country. Once they move to non-OECD countries, however, their behavior is much more similar to that of domestic firms, exhibiting a proclivity

for bribery and other illegal practices (particularly in the area of public procurement), the OECD's Anti-Bribery Convention notwithstanding.⁶

There are also bribes to obtain contracts for the sale of goods and services to the state, bribes to gain preferential access to public enterprises that might be undergoing privatization, bribes to buy political influence and votes, and bribes to shape public policy, although in some countries these might be disguised as campaign contributions and the like. Bribery appears to have played a central role in the interesting case of the financing of political parties in Italy noted by Tanzi (1998) and in a similar case involving Japan's Liberal Democratic Party noted by Bardhan (1997). Bribes can also be used to buy judges and favorable court decisions. And there are intragovernment bribes, such as when the executive bribes members of a parliament to vote favorably for some piece of legislation; these can be paid either in cash — sometimes financed through an extra budgetary (slush) fund — or in kind. In Russia, the distribution of apartments to members of the Duma was often used to secure support for a critically important law, such as the annual federal budget.

Bribery can also be centralized or decentralized. In 1996, at the height of Suharto's power in Indonesia, corruption levels in Indonesia, India and Russia were broadly similar: the countries' rankings on the Corruption Perceptions Index were 45, 46, and 47 respectively. Without a doubt, however, the economic performance of Indonesia over the previous decade had been much better than that of India or Russia. A plausible argument can be made that whereas a centralized bribery-collection machine operated in Indonesia, through the ruling family's collaboration with certain military leaders and selected members of the business community (Suharto's cronies), corruption in India and Russia was far more dispersed and therefore more unpredictable. A "lump-sum" system of corruption like that in Suharto's Indonesia is less likely to distort economic decisions than one in which there are many players, no clear rules, unenforceable "contracts" and a constantly changing universe of potential bribes. Bardhan (1997) makes a similar point in relation to South Korea, arguing that corruption there consisted largely of "lump-sum contributions by the major business leaders to the president's campaign slush fund, without taxing economic activity at the margin" (p. 1325).

Decentralized systems are potentially more damaging to economic efficiency because the uncertainty is much higher, the demands from officials for bribes can permeate all levels of government, and separate systems can develop involving different government agencies, from fire inspectors to itinerant tax collectors to the police. The

⁶ In a case reported by the *Financial Times* (March 24, 2010), "the US Justice Department accused Daimler of having "engaged in a long-standing practice of paying bribes to foreign officials" in at least 22 countries between 1998 and 2008, according to a document filed in a US district court yesterday." According to the *Financial Times*, the court document indicates that "Daimler's deals involved hundreds of payments worth tens of millions of dollars to help win contracts worth hundreds of millions of dollars to provide vehicles to governments." Experts are reported to have said that a settlement "might involve a fine of several hundred million dollars." Daimler is not alone. Again according to the *Financial Times*, "in 2008, German engineering group Siemens settled a bribery scandal with US and German authorities in a $\in 1$ billion deal."

Soviet Union had a highly centralized system of control, with the Communist Party establishing and enforcing the rules and punishing those who engaged in corrupt practices that went beyond permissible limits. With the party's loss of control in the 1990s, corruption flourished and decentralization spurred innovation across a broad range of economic transactions. Banfield (1975, p. 602) quoted Wolfinger, who argued that "decentralized political systems are *more* corruptible, because the potential corrupter needs to influence only a segment of the government, and because in a fragmented system there are fewer centralized forces and agencies to enforce honesty."

3. Why is Corruption so Damaging?

The damage caused by corruption is pervasive. At an extreme, corruption kills. This is eloquently made clear by Ambraseys and Bilham (2011) in a comment published in *Nature*, where they show that 83% of all deaths from building collapse in earthquakes over the past 30 years occurred in countries that are particularly corrupt. This section examines some of the ways — less dramatic but not necessarily less damaging — in which corruption corrodes the foundations of a stable society and economy.

3.1. Impact on public finances

Corruption undermines government revenue and therefore limits the ability of the government to invest in productivity-enhancing areas such as education, infrastructure and health. Not surprisingly, where corruption is endemic, people will view paying taxes as a questionable business proposition. There is a delicate tension between the government as tax collector and businesses and individuals as taxpayers. The system works reasonably well — and the budget becomes an important mechanism of distribution — when those who pay taxes feel that there is a good chance that they will see a future payoff, such as improvements in schools, services, infrastructure and the quality of the workforce. Corruption sabotages this implicit contract.

When government officials allow corruption to flourish, they help to create an environment in which taxpayers feel justified in finding ways to avoid paying taxes or, worse, become bribers themselves. In some cases, lobbying and influence peddling become attractive alternatives to paying all taxes due, a natural response to the signal sent to the private sector by government bureaucrats or legislators that "we are for sale."

To the extent that corruption undermines revenue, it adversely affects government efforts to reduce poverty. According to the World Bank (2014), in 2011 (the latest year for which figures are available), there were 1011 million people living on less than US \$1.25 a day, the definition of extreme poverty. There were 2340 million living on less than US\$2.00 a day, equivalent to some 40% of the population of the developing world. Money that leaks out of the budget because of corruption will not be available to lighten the burden of these people; corruption thus interferes with the fulfillment of

basic human needs. Of course, corruption also undermines the case of those who argue that foreign aid can be an important element of the fight against global poverty — why should taxpayers in richer countries be asked to support the lavish lifestyles of the kleptocrats in failing states?

Corruption also distorts public investment and boosts overall spending, as we shall see below. Other things being equal, this leads to a government deficit larger than it would otherwise be, and a larger deficit will generally mean greater public debt, higher debt-service payments and, inevitably, constraints on other areas of expenditure that could contribute more directly to improved productivity and growth. So, corruption, by undermining revenue, increasing the effective tax burden and boosting expenditure, is highly damaging to public finances. Or, to put it in another way, when corruption depresses revenues, governments — to sustain a given level of expenditure — will be forced to raise tax rates, to forgo the benefits of programs that cannot be financed, or to do both. Governments will often opt to increase consumption taxes because they are easy to collect; these taxes also tend to be regressive, disproportionately affecting lower-income groups. To give another example: in Russia, the minimum pension — received by some 37 million people — fell by 70% in real terms between 1991 and 1996 because the government had "lost" several billion dollars in annual budget revenue through tax exemptions extended to cronies and favored companies.

Johnson *et al.* (1998) used cross-country data to establish that the higher the level of corruption in a country, the larger the share of its economic activity that will go underground, beyond the reach of the tax authorities. Not surprisingly, studies have shown that corruption also undermines foreign direct investment, because it acts in ways that are indistinguishable from a tax; other things being equal, investors will always prefer to establish themselves in less corrupt countries. Reviewing data on foreign direct investment from 14 source countries to 45 host countries, Wei (2000, p. 24) concluded that "an increase in the corruption level from that of Singapore to that of Mexico is equivalent to raising the tax rate by 21–24 percentage points."

3.2. Undermining of private sector development

Corruption undermines the investment climate, discourages private sector development and innovation and encourages various forms of inefficiency; the more widespread it is, the more damaging its effects. Budding entrepreneurs with bright ideas will be intimidated by the bureaucratic obstacles, financial costs and psychological burdens of starting new business ventures (including dealing with corrupt officials to obtain permits and licenses) and may opt to take their ideas to some other, less corrupt country, desist altogether or exit the market early, quickly shutting down newly created companies. So, whether corruption is a barrier to entry into the market or a factor in precipitating early departure, it adversely affects economic growth.

A high incidence of corruption also imposes an additional financial burden on businesses, undermining their international competitiveness. Unlike a tax, which is known and predictable and can be built into a company's cost structure in an orderly fashion, bribes are unpredictable and will complicate cost control, reduce profits and undermine the efficiency of companies that must pay them to stay in business. Corruption is particularly devastating for small and medium-size enterprises — often the engines of economic growth and job creation in the developing world — which may not have the clout of big companies to protect themselves from a proliferation of requests for bribes. Mauro (1995) used some indices of corruption and institutional efficiency to show that corruption lowers investment and thus economic growth. He offers the following example: "If Bangladesh were to improve the integrity and efficiency of its bureaucracy to the level of that of Uruguay (corresponding to a one-standard-deviation increase in the bureaucratic efficiency index), its investment rate would rise by almost five percentage points, and its yearly GDP growth rate would rise by over half a percentage point" (p. 705).⁷

Corruption also contributes to a misallocation of human resources. To sustain a system of corruption, officials and those who pay them will have to invest time and effort in developing certain skills, nurturing certain relationships and building up a range of supporting institutions and opaque systems, such as secret bank accounts and off-the-books transactions. But these "assets" will not be easily transferable to the non-corrupt part of the economy later on — for corruption, by its very nature, is not about boosting productivity and the country's potential wealth; it is fundamentally about the redistribution of rents, which, of course, do not add to economic growth.

Surveys of businesses have shown that the greater the incidence of corruption in a country, the greater the share of time that management has to allocate to ensuring compliance with regulations, avoiding penalties and dealing with the bribery system that underpins them — activities that draw attention and resources away from more productive tasks. Indeed, Bentzen (2012) finds cross-country evidence that corruption exerts a significant and negative impact on countries' productivity levels. Corruption also undermines productivity in government: the more time officials spend building up systems to control corruption — or, in the case of corrupt officials, ensuring that the bribery machinery remains operational, appropriately flexible and secret — the less time they devote to governing and adding value.

⁷Rose-Ackerman (1997b, p. 91) gives an interesting illustration of the effects of corruption on the viability of development projects. Assume that 20% of the funding for a particular project is lost to corruption — this could be because of over-invoicing of costs, losses due to theft of equipment and so on; the details themselves are not essential. Assume a rate of return of 10%. Because of corruption, a US\$100 million project could have been implemented with US\$80 million. An honest project would need to generate benefits of US\$88 million, but the corrupt project would need to produce a return of US\$110 million. So, a project that should have cost US\$80 million, must generate US\$110 million to be viable — this is a rate of return of 37.5% on productively used resources, extremely high by any measure. If one assumes a 30% loss, then the required rate of return rises to 57.1%, and so on. The point is that if you are Bill Gates and you are approached to fund this project, you would be well-advised to say no.

3.3. Distortion of incentives

Research done at the IMF has established that corruption "distorts the entire decisionmaking process connected with public investment projects" (Tanzi and Davoodi, 1997, p. 1). Large capital projects provide tempting opportunities for corruption. Governments will often undertake projects larger than necessary or more complex than warranted by the needs of the country. Public investment will thus be higher — the developing world is littered with the skeletons of white elephants, often built with external credits and representing a heavy burden on meager budgets. Moreover, the productivity of the investment will be lower and, where resources are scarce, governments will find it necessary to cut spending elsewhere, sometimes in socially vital areas or in operations and maintenance. Tanzi (1998) plausibly argues that corruption will reduce expenditure specifically on health and education because these are areas where it may be more difficult to collect bribes.

Indeed, it is possible to generalize the results of Tanzi and Davoodi's work and suggest that corruption risks creating perverse incentives whereby governments will tend to resist economic reforms that, if implemented, would eliminate harmful (but profitable) distortions. So, economic reforms would no longer be examined on their merits, but on the basis of whether they might eliminate bountiful sources of economic rents. For instance, one might delay approving the elimination of export quotas as long as possible because doing so would cut off a rich flow of illicit profits to friends and cronies.

This is by no means a problem limited to developing countries. Lobbying in the United States and other industrial countries is a multi-billion-dollar industry. Were it limited to enlightened public discourse on the merits of proposed pieces of legislation through which interested parties, in a spirit of consultation, aim to help legislators better understand the full ramifications of different courses of action - lobbying would fulfill a beneficial public purpose. The reality, however, is often one where corporate cash greatly degrades the ability of the political system to address real problems. So, to give an example, financial sector reform and measures to strengthen the regulatory role of the state — a glaring need, given the origins of the 2008–2009 global financial crisis — are delayed and watered down under the onslaught of "campaign contributions" to politicians for whom re-election always takes priority over the public interest. Some would argue that well-documented lobbying with tough disclosure requirements is better than bribing. But the impression that aggressive lobbying sometimes creates is that it is a more sophisticated mechanism for achieving the same ends sought by those engaged in outright bribery: to obtain some special government dispensation in exchange for a favor (Dworkin, 2010).

3.4. Worsened income distribution

Corruption has disturbing distributional implications. In empirical work done at the IMF, Gupta *et al.* (1998) showed that corruption, by lowering economic growth,

perceptibly pushes up income inequality. It also distorts the tax system, because the wealthy and powerful are able to use their connections to ensure that the tax system works in their favor. It leads to inefficient targeting of social programs, many of which will acquire regressive features, with benefits disproportionately allocated to the higher income brackets (an issue examined more closely below). Corruption is also associated with lower social spending, unequal access to education and the "use of wealth by the well-to-do to lobby governments for favorable policies that perpetuate inequality in asset ownership" (p. 4).

3.5. Uncertainty and short-term focus

Corruption creates uncertainty. There are no enforceable property rights emanating from a transaction involving bribery. A firm that obtains a concession from a bureaucrat as a result of bribery cannot know with certainty how long the benefit will last. In a competitive market, others may appear and be willing to pay more for it. The terms of the "contract" may have to be constantly renegotiated to extend the life of the benefit or to prevent its collapse. Indeed, the firm, having flouted the law, may fall prey to extortion from which extricating itself may prove difficult. Rose-Ackerman (1998) observes that in Malaysia, companies that had secured illegal logging rights had incentives to cut as many trees as possible as fast as possible, because there was no certainty that these rights would not soon be revoked. There are similar examples involving oil and mining concessions in other countries. Of course, in an uncertain environment with insecure property rights, firms will be less willing to invest and to plan for the longer term. A short-term focus to maximize short-term profits will be the optimal strategy, even if this leads to deforestation or the rapid exhaustion of nonrenewable resources. The structure of production for firms paying bribes will potentially be distorted.

This uncertainty is partly responsible for a perversion in the incentives that prompt individuals to seek public office. Where corruption is rife, politicians will want to remain in office as long as possible, not because they are even remotely serving the public good but because they will not want to yield to others the pecuniary benefits of high office — thus the prevalence of "presidents for life," particularly in Africa. Where long stays in office are no longer an option, a new government, given a relatively short window of opportunity, will want to steal as much as possible as quickly as possible. Michaela Wrong's *It's Our Turn to Eat* (2009) provides an excellent case study of this, focused on Kenya following the departure of Daniel arap Moi in 2002, after 24 corruption-ridden years in power.

3.6. Secrecy and deceit

Corruption encourages secrecy, which makes informed debate about its incidence and effects difficult. Stiglitz (1999) notes that government officials may engage in secrecy

and secretive practices for a variety of reasons. For instance, secrecy is often a convenient way to hide mistakes or to reduce the chances of being accused of making mistakes. Public policy is inherently difficult, and officials, fearing public criticism, may find it more convenient to act in ways that are opaque. With little information disclosure, governments can report the results of policies and decisions in ways that cast a more favorable light on their performance. It is widely acknowledged, for instance, that Greece "qualified" for participation in the euro area by cooking the data and thus disguising the true state of its public finances — something that would not have been possible with full and open disclosure of fiscal data.

A second incentive for secrecy according to Stiglitz (1999, p. 11) is that it "provides the opportunity for special interests to have greater sway." The United States invested trillions of dollars during the Cold War to build up a fearsome military establishment. But this was based on a wild overestimation of the economic and military might of the Soviet Union. Had much of the information about the alleged power of the Soviet Union not been shrouded in secrecy, the U.S. military-industrial complex might have found it much more difficult to make a credible case for the vast expansion of the defense industry. Instead, more resources might have gone into education, infrastructure, and research and development — more productive expenditures.

The need for secrecy in connection with the payment of bribes has an additional damaging effect on the internal systems of checks and balances that societies have developed to guard against the abuse of power and without which corruption can grow without restraint. In Italy, according to Brademas and Heimann (1998, p. 21), "payoffs to political parties started at 5% of the price of government contracts, then escalated to 8%, 10%, and finally 15%. As the amounts involved shot up, the funds were no longer restricted to political parties. Instead, they went increasingly to the personal accounts of leading politicians. The more egregious the system, the more inevitable the ultimate explosion."

3.7. Betrayal of trust

Because corruption is a betrayal of trust, it diminishes the legitimacy of the state and the moral stature of the bureaucracy in the eyes of the population. While efforts will be made to shroud corrupt transactions in secrecy, the details will leak out and will tarnish the reputation of the government. By damaging the government's credibility, this will limit its ability to become a constructive agent of change in other areas of policy. Corrupt governments will have a much tougher time — without resorting to repression — to continue to be credible enforcers of contracts and protectors of property rights. According to Bardhan (1997, p. 1341), the loss of respect associated with corruption will often degenerate into "disloyalty and thievery among public officials." As noted earlier, officials will have difficulties in persuading individuals and businesses to pay their taxes.

With trust betrayed, what often follows is popular discontent. Clausen *et al.* (2011) recently used evidence from the Gallup World Poll to show that there is a strong negative correlation (with a causal explanation, at least in part) between corruption and confidence in political institutions.

This popular discontent can sometimes be used by unscrupulous politicians to fan political passions and has often led to pronounced shifts in the relative strength of ruling parties and contributed to greater political instability; in more extreme cases, as noted by Noonan (1984, p. 700), it can precipitate coups and violent revolutions. During the Cold War, Communists cynically used instances of corruption in the capitalist West to attract converts to their cause. Of course, pervasive corruption in the Soviet Union and its satellites was itself a precipitating factor in the collapse of Communism.

3.8. A contagious disease

Corruption inevitably creates inequity. Honest enterprises that pay import duties and excise taxes are at a competitive disadvantage relative to dishonest ones that bribe customs officials. And the longer the honesty endures, the tougher the competition provided by the bribers is likely to be. For the honest enterprises, the alternative to bribing is often to go out of business.

This type of corruption also has an impact on the *supply* of corruption. As honest government officials see their peers taking comfortable early retirement or leaving government to setup prosperous new businesses financed by the bribes they collected, pressures are created "to enter the market" and become part of the fraternity. These pressures may be internal, such as perceptions of income losses by honest officials relative to their unscrupulous colleagues. Or they may be external, as in Hong Kong SAR, China, in the 1960s, for instance, when corrupt police officers would harass younger ones who refused to take bribes (Banfield, 1975).

One of the most egregious examples of how corruption can rapidly metastasize in the economy relates to tax exemptions in Russia. It all began in 1993, when the government granted an exemption to the National Sports Foundation. Supposedly created to encourage athletes' preparations for the 1996 Atlanta Olympics, the foundation quickly turned into the largest importer of tobacco, alcoholic beverages and various luxury items in Russia. The loss of several billion dollars of tax revenue should have been enough to warn the government about the dangers of permissiveness in tax exemptions, but within a year the Afghan War Veterans' Union had managed to secure similar treatment. Not to be outdone, the Humanitarian Aid Commission approved the tax-free importation of alcoholic beverages by religious and other organizations, on the understanding that the proceeds of the sale of these beverages would be used for humanitarian purposes. Tax-exempt imports through the commission amounted to several hundred million dollars a month, and there were no mechanisms in place to ensure that the sale proceeds were actually used for humanitarian ends. In both these cases, the granting of the initial tax exemptions created a demand for additional ones, as those who had not received exemptions perceived their business interests as having been adversely affected.

3.9. The spread of crime

Finally — and this list is by no means exhaustive — bribery and corruption contribute to other forms of crime. Because corruption breeds corruption, it tends soon enough to lead to the creation of organized criminal groups that use their financial power to infiltrate legal businesses, to intimidate and to create protection rackets — producing, in extreme cases, a climate of fear and uncertainty that will undermine the investment climate. Where the stakes are high, rival groups may resort to contract killings and the like, pushing the homicide rate way up, as has happened recently, for instance, in Venezuela and countries in Eastern Europe and the former Soviet Union. In states with weak institutions, the police may be overwhelmed, reducing the probability that criminals will be caught. This, in turn, encourages more people to become corrupt, further impairing the efficiency of law enforcement — a vicious cycle that will affect the investment climate in noxious ways, further undermining economic growth. In many countries, as corruption gives rise to organized crime, the police and other organs of the state may themselves become criminalized. By then, businesses will not only have to deal with corruption-ridden bureaucracies, they will also be vulnerable to attacks from competitors who will pay the police or tax inspectors to harass and intimidate.

In fact, there is no limit to the extent to which corruption, once unleashed, can undermine the stability of the state and organized society. Tax inspectors will extort businesses; the police will kidnap innocents and demand ransom; the prime minister will demand payoffs to make himself available for meetings; aid money will disappear into the private offshore bank accounts of senior officials; the head of state will demand that particular taxes be credited directly to his personal account. Investment will come to a standstill, or worse, capital flight will lead to disinvestment. Corruption will also interact in lethal ways with other, country-specific structural features, such as ethnic or religious diversity, income disparities and tribal politics, as is made abundantly clear, for instance, in Wrong's (2009) account of corruption in Kenya.

In countries where corruption becomes intertwined with domestic politics, separate centers of power will emerge to rival the power of the state. At that point, the chances that the government will be able to do anything to control corruption will disappear and the state will mutate into a kleptocracy, the eighth circle of hell in Dante's *Divine Comedy*. Alternatively, the state, to preserve its power, may opt for total war, engulfing the country in a cycle of violence. Corrupt failed, or failing, states become a security threat for the entire international community, "because they are incubators of terrorism, the narcotics trade, money laundering, human trafficking, and other global crime — raising issues far beyond corruption itself" (Heineman and Heimann, 2006, p. 79).

4. Reducing Corruption

What are some of the options open to governments wishing to reduce corruption and mitigate its effects?⁸ Rose-Ackerman (1998) recommends a two-pronged strategy aimed at increasing the benefits of being honest and the costs of being corrupt, a sensible combination of reward and punishment as the driving force of reforms.

In Rose-Ackerman's view, a variety of factors influence incentives for corruption. These include such things as the level of discretion exercised by officials in carrying out their duties; as argued in earlier sections, the greater the scope for discretion, the greater the opportunities to engage in corrupt activities. Whether civil servants are appropriately compensated for their work or grossly underpaid relative to private sector peers will clearly affect their motivation and incentives. If public sector wages are too low, employees may find themselves under pressure to supplement their incomes in "unofficial" ways or, worse, the public sector will attract opportunists and bribe takers, eager to tap into existing rents. Through empirical work focusing on a sample of less developed countries, Van Rijckeghem and Weder (2001) show that there is an inverse relationship between the level of public sector wages and the incidence of corruption. Others have pointed out that Singapore, among the countries most successful in reducing corruption in the public sector, has some of the highest paid public servants in the world.

The ability of citizens to scrutinize government activities and debate the merits of public policies also makes a difference. So, press freedoms and high levels of literacy — ensuring access to information on the performance of politicians and the content of their policies — will shape the context for reforms in important ways. An active civil society, with a culture of participation in civic organizations, can be another important element supporting strategies aimed at reducing corruption. Also key is the presence of an active political opposition, because it tends to be associated with greater public scrutiny of government policies and initiatives. Adequate investment in absorbing the latest technologies is important too; as argued below, technology can be a powerful tool to eliminate or greatly reduce some traditional sources of corruption, such as in public procurement. Credible law enforcement institutions, along with an adequate legal framework to guide and support their activities, could also be added to this list.

4.1. A lighter regulatory burden

The strong correlation between the incidence of corruption and the extent of bureaucratic red tape as captured by the *Doing Business* indicators (see Fig. 1) suggests one

⁸Some economists would argue that as average income rises, countries become less corrupt, so that in the longer term the best policy for mitigating corruption is to reduce poverty and promote more rapid economic growth. But we cannot afford to wait a hundred years for this to happen. As this section argues, there are plenty of things that can be done in the short-term to deal with the devastating effects of corruption, potentially providing larger payoffs in a cost-effective way in the fight against corruption.

A. López Claros

possible starting point: to eliminate as many needless regulations as is compatible with safeguarding essential regulatory functions of the state. The sorts of regulations that are on the books of many countries — requiring citizens to acquire a plethora of certificates and licenses for routine interactions with the state, such as to open a new business or register property — are often a legacy of the past, no longer relevant to the needs of the present. Rather than serving the purpose for which they were introduced, sometimes decades ago, they have metamorphosed into potential sources of economic rents, luring officials into corruption and illegality. Dreher and Gassebner (2013) provide empirical evidence that requiring a large number of procedures to start a business not only reduces firm entry but also provides an incentive for corruption, because corruption facilitates firm entry in highly regulated economies.

The elimination of red tape can be promoted as part of reforms to modernize the state. The world's most competitive economies are those that have managed to lighten the regulatory burden as a way of enhancing efficiency, essential if a country is to be able to compete abroad. There is no need to be ideological about regulation. There will always be scope for a minimum set of rules, in such areas as consumer protection, management of the environment and prudential requirements related to banking operations. The issue is one of efficiency, the need to do away with rules and procedures that no longer serve any purpose other than to create employment and rents for the bureaucrats who manage them. Rose-Ackerman (1998, p. 45) suggests that "the most obvious approach is simply to eliminate laws and programs that breed corruption." She cites the example of Prohibition in the United States during the period 1919–1933. Introduced by the Eighteenth Amendment to the U.S. Constitution, Prohibition spawned a vast web of corruption, including in law enforcement agencies. Appalled by the unintended results, the country concluded by the early 1930s that repeal would be the better option.

These arguments can be extended to make a more general point applying not just to regulations and other administrative controls that become sources of potential rents, but to all policies that help undermine competition and efficiency. One of the bitter lessons from decades of central planning was that a system in which prices reflect relative scarcities in the market — providing a decentralized system of signals and incentives — is much better for the allocation of resources than one based on administrative controls. When decision making is decentralized and market forces given greater scope, economies will be more dynamic and flexible and thus better able to cope with external shocks. During the 1980s and 1990s, price liberalization and the easing of bureaucratic controls became key features of many programs supported by the international financial organizations and bilateral donors, and these policies, by helping to eliminate distortions, did much to eliminate long-standing sources of corruption. Freeing up prices can also spur entrepreneurial creativity, as became clear in the early phase of the transition in Central and Eastern Europe. For instance, millions of Russians found employment as retail traders, ready to supply markets previously characterized by persistent shortages, which had themselves been sources of rents and corruption.

Similar principles became evident in the agricultural sector. During much of the postwar period, many developing countries, particularly in Africa, relied on state-run enterprises to market their agricultural products, using administratively determined producer prices to set the levels of compensation for farmers. These enterprises were generally unable to maintain producer prices in real terms, discouraging agricultural production and instead promoting illicit trade at the expense of legal export activity. Middlemen in league with corrupt officials would often secure monopolies over certain activities (as in Bolivia, where a transport monopoly forced farmers in a particular region to use a single carrier to get their products to market), to the detriment of small-scale producers. Reforming agricultural marketing systems and setting producer prices at competitive levels thus became another way in which governments could help eliminate incentives for corruption while simultaneously improving efficiency.

The need for price flexibility also applies to prices with a direct bearing on the macroeconomic environment, such as the exchange rate and interest rates. The past several decades are littered with examples of countries unwilling to adjust official exchange rates, notwithstanding evidence of overvaluation and the development of often large-scale parallel (black) exchange rate markets. The overvaluation impeded the development of tradable sectors in many countries and contributed to the weakening of their balance of payments, undermining their ability to import much-needed machinery and new technologies from abroad.

4.2. An end to mindless subsidies

Subsidies are another example of how government policy can distort incentives and create opportunities for corruption. Governments in some instances may want to support certain vulnerable groups through well-targeted income support, but in practice they provide much of their subsidy support without regard to recipients' income levels. Consider energy subsidies, for instance. According to an IMF study (2013), consumer subsidies for petroleum products, electricity, natural gas and coal amount to some US\$1.9 trillions a year (with the cost of negative externalities from energy consumption factored in), equivalent to about 2.5% of global GDP or 8% of total government revenues. These subsidies are very regressively distributed. For gasoline, with the most regressively distributed subsidies, more than 60% of benefits accrue to the richest 20% of households. For liquefied petroleum gas (LPG), this share is 54%, and for diesel, it is 42%. The study further notes that "removing these subsidies could lead to a 13% decline in CO_2 emissions and generate positive spillover effects by reducing global energy demand" (p. 1).

More important for the purposes of the discussion here, subsidies often lead to smuggling, to shortages and to the emergence of black markets and corruption. The mechanisms are generally simple. In Bolivia, for instance, substantial subsidies on LPG lead to a thriving smuggling business on the border with Peru as Bolivians respond to the incentives created by a three-to-one price difference between the two markets. Leaving aside the opportunity cost associated with wasteful consumer subsidies (how many schools could be built with the cost of one year's LPG subsidy?) and the environmental implications of high (and often wasteful) consumption resulting from artificially low prices, subsidies can often put the government at the center of corruption-generating schemes, hardly a desirable outcome. Initially intended to cushion the impact of high international prices, subsidies mainly boost consumption, weaken the budget, distort incentives and, in many countries, end up perverting public policy. But governments are often unwilling to eliminate them because of (at times violent) protests and riots by a public accustomed to low prices. Subsidies therefore have a tendency to become entrenched, diminishing the government's ability to spend in more productive areas.

All this highlights an important point raised by Tanzi (1998, p. 587) when he writes that "to a large extent it is the state that through its many policies and actions, creates the environment and incentives that influence those who pay bribes and those who accept or demand them. It is the state that influences the relationship between briber and bribee." It is as difficult to argue with this observation as with his conclusion that much of the discussion about ways to reduce corruption must focus on ways to enhance the efficiency of the state and its underlying policies and institutions. Rose-Ackerman (1997b, p. 40) goes further, suggesting that "because corruption is tied to other features of government structure, reducing corruption without a more fundamental change in the behavior of public institutions is unlikely to be successful in promoting growth."

4.3. A better budget process

Governments collect taxes, tap capital markets to raise money, receive foreign aid and, increasingly in many countries, humanitarian assistance — and develop mechanisms to allocate these resources to satisfy a multiplicity of needs. Some do this in ways that are relatively transparent and try to ensure that resources will be used in the public interest. New Zealand is a pioneer in this area, having approved the Fiscal Responsibility Act in 1994 to provide a detailed legal framework for transparent management of public resources. It is no coincidence that New Zealand is consistently among the top performers in Transparency International's Corruption Perceptions Index.

Organizations like the IMF have identified good practices that have proved to be effective in promoting better management of public funds. Some relate to mechanisms used by governments every year to approve the budget. There is broad consensus that the draft budget should provide detailed explanations of fiscal targets and priorities, that there should be free and open legislative debate and authorization and that execution of the budget should be transparent, with public disclosure of performance and audits. There is also agreement that the use of extra-budgetary funds should be strictly limited and that the budget should be comprehensive, capturing all sources of revenue and all items of expenditure. In addition, taxes and tax collection should be based on established laws and provisions, not left to the discretion of the tax authorities. Many countries have tax codes that clearly lay out taxpayers' rights and obligations, that regulate the imposition of penalties to ensure that they are not used by unscrupulous politicians against political opponents and that establish independent review agencies with the authority to investigate government operations.

Countries that have followed New Zealand's lead have also sought to establish clear lines of responsibility among different levels of government, to reduce the possibility for discretion and to lessen uncertainty. The importance of these issues cannot be overestimated. Lack of clarity in the budget process or ambiguity in delineating responsibilities and boundaries provides rich opportunities for corruption.⁹ How governments manage the budget has a considerable bearing on the incidence of corruption, because the budget represents the single largest pocket of resources in a country's economy, sometimes equivalent to almost half of GDP. The more open and transparent the process, the less opportunity it will provide for malfeasance and abuse.

Collier (2007, pp. 66, 150) provides distressing examples of the impact of ineffective systems of budget control. In Chad, a 2004 survey tracking the funds released by the Ministry of Finance for rural health clinics established that less than 1% actually arrived at the intended destination — more than 99% was "lost" along the way. In Uganda, a similar survey showed that only 20% of budget allocations for primary schools (other than teachers' salaries) were getting through to the schools. But once the Ministry of Finance started providing information — to the media and to individual schools — about the allocations made, compliance rose to 90%.

Improving the processes and mechanisms for preparing and executing the budget may well be among the most fruitful areas in which multilateral organizations could assist in the fight against corruption. Given their reluctance to wade into "political" waters, there is no need to frame such reforms as a way to reduce corruption. It is enough to see the benefits in terms of gains in efficiency and better resource allocation. The IMF could be a particularly important player, given its vast expertise on fiscal issues and its ample leverage stemming from its ability to quickly disburse resources.

4.4. Reforms in other areas

Rose-Ackerman (1998) and others provide a useful overview of other measures or reforms that will help improve the control of corruption. These include establishing "a viable legal framework that enforces the law without political favoritism or arbitrariness" and that is buttressed by a credible system of penalties for offenders; improving the pay for judges and giving them greater independence from the executive; increasing the clarity of laws, to reduce the scope for disputes and abuse; and creating a

⁹For a detailed discussion of the Russian budget process in the 1990s and the ways in which the system afforded countless opportunities for corruption, see Lopez-Claros and Alexashenko (1998, pp. 29–34). Diamond (2006) has an extensive discussion of issues in budget system reform, providing an extremely helpful international perspective.

tough, independent anticorruption agency that "represents a credible long-term commitment and includes checks on its ability to be misused for political ends." Appointing credible ombudsmen to help businesses and individuals facing requests for bribes can also be part of efforts to protect citizens from corruption.

An important focus is the civil service. Proposed measures include ensuring that civil service pay is competitive with the pay for comparable positions in the private sector. A variant of this involves generous pensions that can be drawn on only if the employee retires in good standing, an example of potential ways to increase the opportunity cost of corruption. To be effective, these proposals obviously must also involve streamlining the civil service. Many governments use public sector employment as a form of fiscal stimulus or, worse, as a refuge for the ruling party faithful. But excessive levels of public sector employment will curtail the government's ability to adequately compensate civil servants. In parallel, these measures may also require good economic management more generally, to expand job opportunities in the private sector and to avoid having to use the government as the employer of last resort.

In addition, Kaufmann (1997) makes a case for government attention to the financial sector, given that "fraud-driven financial crises" can be extremely costly. Abuses of an otherwise flawed regulatory system for the financial sector in the United States are now universally acknowledged to have been a primary cause of the 2008– 2009 global financial crisis.

4.5. A greater role for donors

There appears to be ample scope for the donor community to bring the elimination or mitigation of corruption much closer to the heart of its aid programs. The issue does not even need to be framed in moral or ethical terms — which could awaken latent sensitivities with roots in the colonial era. If excessive regulation, tax exemptions and subsidies have become important sources of rents for government bureaucrats, tackling them can be justified simply on the basis of how this will contribute to gains in efficiency and, by eliminating distortions, to the modernization of the state. Unfortunately, donors are often reluctant to confront these issues head on and make them central to their aid policy agendas. As many observers have noted, including Easterly (2006, p. 181), the international financial institutions often have an internal culture that rewards lending and that predisposes international civil servants to give governments the benefit of the doubt, lest tough scrutiny should derail loan programs by exposing extensive corruption.

An undue focus on eliminating sources of corruption might make loans less attractive to governments (whose officials will often be the largest potential losers from the reforms) and jeopardize the donor's lending operations. So, issues of corruption (or reforms aimed at indirectly cutting off its sources) will be swept under the carpet and the money flows will continue. International civil servants will pretend that limited reforms are better than no reforms at all or persuade themselves (unrealistically) that they can protect certain projects from pervasive corruption elsewhere. They will say to each other that it is important to keep open lines of communication with the authorities in the recipient country, to "engage" and try to prop up the few reform-minded ministers who can always be found, even in the most corruption-ridden places.

Nor does it help that the international financial organizations may have a conflict of interest at the heart of their operations. The IMF, for instance, finances its administrative expenditures (the salaries of its staff, the upkeep of its comfortable headquarters) out of the interest charged on the loans it makes to its members. Other things being equal, the organization will not be indifferent between lending and not lending. A mission head who successfully negotiates a program with a client country will be in a stronger position relative to his or her peers than one who argues that there is no basis for making a loan because the country is run by thieves or, more likely, because the authorities, while ready to agree to the IMF's conditions on paper, have no intention of actually implementing them or will do so only haphazardly and with considerable delays.

In Russia in the 1990s, for instance, the IMF opted to focus on helping the government bring down inflation and rein in the budget deficit, worthy macroeconomic goals that should have been part of any program of external support. But the organization underestimated the leverage it had through its quick-disbursing resources leverage that could have been used more proactively to help dismantle the extensive web of tax exemptions and other mechanisms that many were using for personal enrichment. It is difficult to disagree with Easterly (2006) when he says that "aid critics have to persuade the rich-country public and politicians not to reward agencies for how much money is mobilized; what matters is results" (p. 183).

4.6. Stronger implementation of international conventions

Because corruption increasingly has cross-border effects, the international legal framework for corruption control has a key part to play. This framework has improved substantially over the past decade. Besides the OECD's Anti-Bribery Convention, referred to earlier, there are regional conventions covering Africa, Europe and the Americas. In addition, the United Nations Convention against Corruption (UNCAC) entered into force in December 2005 and had been ratified by 132 of its 140 signatories by late 2014.

According to Heineman and Heimann (2006), the UNCAC is a very promising instrument because, unlike the OECD convention, it creates a global legal framework involving developed and developing nations and covers a broader range of subjects (including domestic and foreign corruption, extortion, preventive measures, antimoney-laundering provisions, conflict-of-interest laws and means to recover illicit funds deposited by corrupt officials in offshore banks). Because the United Nations has no enforcement powers, the effectiveness of the convention will very much depend on the establishment of adequate monitoring mechanisms to assess government compliance. The United Nations Development Programme, the World Bank and other international organizations could also help, by providing technical assistance to countries willing to develop the capacity to comply with the convention's provisions. Even so, the UNCAC's ambitious scope and country coverage suggest that it could take some time before its benefits are fully realized.

In the meantime, Heineman and Heimann (2006) argue, a more workable approach in the fight against corruption may be more robust implementation of the anticorruption laws in the 40 states that have signed the OECD's Anti-Bribery Convention. Ala'i (2000, p. 924) makes a broadly similar point: "The aim is that the signatories, by national implementation, will provide clear and detailed rules that are functionally equivalent to one another in punishing and deterring bribery by international business." This would require governments to be more proactive in cracking down on OECD companies that, contrary to the convention's provisions, continue to bribe foreign officials. This is a serious problem, as the recent cases against Siemens and Daimler make clear. Governments have at times been tempted to shield companies from the need to comply with anticorruption laws, in a misguided attempt to avoid undermining the companies' competitive position in other countries.

Trade promotion should not be seen to trump corruption control. Yet governments continue to be afflicted by double standards, criminalizing bribery at home while often looking the other way when bribery involves foreign officials in non-OECD countries. This is a sad legacy of the colonial era, when governments in developed countries tended to justify bribery abroad by seeing it as part of the cultural landscape of the developing world, a cost of doing business in alien (and presumably more corrupt) settings.¹⁰ The idea that bribery of foreign officials in non-OECD countries is good for business has a long history, and changing the underlying cultural mindset will take energetic and concerted efforts.

To add credibility to their announced commitment to the goals of the convention, governments also need to develop an effective mechanism to investigate and prosecute cases of corruption. But the responsibility for corruption control does not rest with governments alone. As originators of bribery and frequent victims of extortion, businesses, particularly multinational corporations, also have a key part to play. To ensure effective compliance, companies will need "robust systems that can educate and train staff, detect problems through internal auditors and an honest ombudsman system, investigate allegations of corruption quickly and thoroughly, sanction guilty parties

¹⁰Lord Young, the former secretary of state for trade and industry of the United Kingdom and chairman of Cable & Wireless PLC, said the following in a BBC radio broadcast aired in April 1994: "The moral problem for me is simply jobs. Now when you're talking about kick-backs, you're talking about something that's illegal in this country, and that, of course, you wouldn't dream of doing. I haven't even heard of one case in all my business life of anybody in this country doing things like that. But there are parts of the world I've been to where we all know it happens. And if you want to be in business you have to do — not something that is morally wrong, because in some parts of the world … that's not immoral or corrupt. It is very different from our practice and would be totally wrong in our environment but wasn't wrong in their environment; and what we must be very careful of is not to insist that our practices are followed everywhere in the world" (quoted in Ala'i, 2000, p. 930).

regardless of where they are on the corporate ladder, and fix the practices that caused the problem" (Heineman and Heimann, 2006, p. 84).

Given what we now know about the damage caused by corruption worldwide, no self-respecting multinational corporation with credible long-term strategies for growth and brand development will want to be associated with bribery and other forms of malfeasance. The potential for damaging revelations and multimillion-dollar fines suggests that bribery is not cost-effective. In fact, it is a completely senseless business strategy.¹¹

4.7. Technology to the rescue

Frequent, direct contact between government officials and citizens can open the way for illicit transactions. In his fine book *Controlling Corruption*, Klitgaard (1988) described an extremely promiscuous environment at the Philippine Bureau of Internal Revenue in the mid-1970s, with employees "buying and selling jobs and transfers in the bureau, ... collecting and embezzling tax money ... accepting bribes from tax-payers for lower assessments Some officials went so far as to extort money from taxpayers, threatening them with high assessments and the prospect of costly litigation unless the victims paid a bribe" (p. 13). A common feature in these transactions was the direct, personal contact between tax inspector and taxpayer. The *arreglo* (arrangement) had evolved into an essential institution of the bureau, a negotiated tax settlement with clearly defined shares for the government, the inspector and the taxpayer.

One way to address this problem is to use readily available technologies to encourage a more arm's-length relationship between officials and civil society. The Internet has been empirically proved to be an effective tool to reduce corruption (Andersen *et al.*, 2011), and its potential can be even better understood by looking at its application to tax collection, public procurement and other forms of interactions between citizens and the public sector.

Few countries have been as successful in promoting e-government as Chile, ranked 8th worldwide in the UN E-Participation Index for 2012. Recognized as a pioneer and global leader in the use of technologies aimed at enhancing transparency and efficiency in government, the country has introduced online platforms to facilitate government interactions with citizens and businesses. Chile's Internal Revenue Service, one of the most modern tax administrations in the world, uses its website to process annual and monthly income tax statements, electronic invoicing and fee billing, and electronic start-up application forms. It also provides assistance to small businesses with accounting and electronic invoicing. Compliance levels are high, showing that technology can help not only eliminate corruption in the payment of taxes but also improve

¹¹There would appear to be an enormous amount of work ahead for the business community. According to Heineman and Heimann (2006, p. 76), Paul Volcker's sharply critical report on the UN oil-for-food program showed that nearly half the 2000 companies that participated in it "may have been involved in kickback schemes."

overall efficiency. The statistics are impressive: more than 99% of Chilean taxpayers use the internet to pay their income taxes.

Another area ripe with potential for corruption, and thus with opportunities for technology-based solutions, is public procurement. Purchases of goods and services by the state can be sizable, typically amounting in most countries to between 10% and 15% of GDP and worldwide to US\$9.5 trillion a year, a huge sum. Because the awarding of contracts can involve a measure of bureaucratic discretion, and because most countries have long histories of graft, kickbacks and collusion in public procurement, more and more countries have opted for procedures that guarantee adequate openness and competition, a level playing field for suppliers, fairly clear bidding procedures and the like.

But practices vary widely across countries, of course. Often the poorer the country is, the more archaic — and thus the more vulnerable to corruption — are the rules governing public procurement. Klitgaard (1988, pp. 134–155) offers a fascinating case study on procurement in Korea in the 1960s and 1970s and the creative ways in which suppliers — through schemes involving a combination of collusion, kickbacks and physical intimidation — were able to extort massive and illicit profits from the procurement process.

As with tax collection, Chile has used the latest technologies to create one of the world's most transparent public procurement systems. Chile Compra, launched in 2003, is an Internet-based public system for purchasing and hiring that has earned a worldwide reputation for excellence, transparency and efficiency. The system serves companies and public organizations (including schools, hospitals, universities, the military, government ministries and Congress) as well as individual citizens. It is by far the largest business-to-business site in Chile, involving 850 purchasing organizations. In 2012, registered users completed 2.1 million purchases totaling US\$9.1 billion.

The third area in which Chile has spearheaded the use of technology to improve the efficiency of the state is in the reduction of red tape. Chile Atiende, a government site coordinating the work of more than 150 government agencies and private institutions, manages close to 2000 administrative processes online — including birth certificates, identity documents, housing subsidies, university credits, pension fund payments, and patents and trademarks. The site receives an average of more than 1 million visits a month.

In all these areas, there is ample scope for technical assistance from the international financial institutions. Chile was able to implement its reforms in public services because it had the financial means, the human capital resources and the strong backing of its politicians to use technologies to improve the efficiency of these services. Many developing countries may have the will to implement similar reforms, but often lack the funding or the technical means to put such systems in place. Over the past several decades, we have tended to underestimate the relative importance of technical assistance in foreign aid programs. Often the *knowledge* gap — the inability to tap into best practices because of a lack of adequate human resources — is far more insurmountable than the *financial* gap, which donors can fund.

5. Conclusion: The Moral Dimensions of Corruption

In his erudite and all-encompassing study of bribery through the ages, Noonan (1984, p. 700) observes that "the common good of any society consists not only in its material possessions but in its shared ideals. When these ideals are betrayed, as they are betrayed when bribery is practiced, the common good, intangible though it be, suffers injury." Bribery and corruption — however much the experts may wish to disguise them in the language of costs and benefits and economic choices — have a moral dimension. We ignore it at our own risk and at considerable cost to society, because doing so undermines the effectiveness of measures taken to limit or ameliorate their corrosive effects. Noonan gives several reasons to support the thesis that bribery has a strong moral dimension. By now, it has been criminalized in virtually every country on the planet, although enforcement of the laws condemning it may be weak. As we have seen, corruption itself may have weakened the state and its capacity to punish violations of the law, but there is little doubt that bribery is regarded everywhere as a perversion — thus the need for secrecy, for deception and for the use of euphemisms ("gifts," "contributions") by the guilty when it explodes into the open.

Bribery interacts with power. Those who are willing to pay the most will be granted the exemption, will shut out the competitor, will gain the advantage. A plutocracy, a world in which wealth and money rule, is not a system likely to capture the popular imagination. Bribers understand this, and for that reason they do not advertise their actions and are condemned to act behind the scenes, on the margins of legality and morality. Of course, bribery and corruption are betrayals of trust. Noonan (1984, p. 704) puts it elegantly when he says, "the social injury inflicted by breaches of trust goes beyond any material measurement. When government officials act to enrich themselves they act against the fabric on which they depend, for what else does government rest upon except the expectation that those chosen to act for the public welfare will serve that welfare?" Equally important, bribery and corruption are deeply at odds with the moral basis of most of the world's great religions, which have often provided the moral underpinnings of the modern state, as is clear, for instance, from reading the U.S. Constitution and other such founding documents.

In many of the measures discussed in the previous section aimed at combating corruption, the underlying philosophy is one of eliminating the opportunity for corruption by changing incentives, by closing off loopholes and by doing away with misconceived rules that encourage corrupt behavior. If, for instance, the budget is formulated, approved and executed in an environment of clear rules and transparent procedures, it is far less likely to be a mechanism for abuse and personal enrichment. But an approach that focuses solely on changing the rules and incentives, accompanied by appropriately harsh punishment for violation of the rules, is likely to be far more effective if it is also supported by efforts to buttress the moral and ethical foundation of human behavior. A strategy in the struggle against corruption that is based solely on the design of better rules and harsher punishment for offenders is likely to be expensive

and inefficient: expensive because of the need to build an infrastructure of enforcement that is credible and that catches and deals with offenders, and inefficient because it immediately pits the regulators against the offenders in a cat-and-mouse game. And we have seen that the mice are often well equipped to win, because the stakes are so high and the cat (the regulator) is underpaid, overstretched and outsmarted. The 2008–2009 global financial crisis revealed huge gaps in the regulation of the "shadow" banking system (hedge funds, investment banks, other off-balance-sheet vehicles), but also showed that poorly paid regulators are no match for the creativity of bankers willing to stretch the rules in an effort to disguise reality and boost short-term profits.

This means that in the long term, anticorruption strategies have to be supported by moral education and the strengthening of the ethical principles underpinning society.¹² This may mean reinforcing the civic responsibility component of secular education. It may require religious leaders — who bear such heavy responsibility for the decline of religion as a force for social cohesion — to set aside narrow doctrinal differences and return to the spiritual roots of their respective faiths to revitalize their ability to lead individuals and societies to a stronger identification with the spiritual rather than the material dimension of human nature. In particular, it will involve partnerships with all the organizations and social forces that have a strong ethical foundation. In a society with stronger ethical standards, the struggle against corruption will gain a new source of strength that will complement the progress made in recent years in improving the legal framework designed to combat bribery and corruption.

Acknowledgments

The views expressed in this paper are his own and do not necessarily represent those of the organisation with which he is affiliated. The paper is part of a larger project looking at some of the key building blocks for the creation of the institutional underpinnings for sustainable economic development. The author is grateful for helpful discussions with and comments from Farshad and Arjomandi, Arthur Dahl, Jose Maria Figueres, Francis Fukuyama, William Hatcher, Daniel Kaufmann, Robert Klitgaard, Cristina Manzano, Douglas Martin, Bahiyyih Nakhjavani, Valeria Perotti, Eduardo Rodriguez Veltze, Stephen Rutt, Federica Saliona and graduate students at the Center on Democracy, Development and the Rule of Law at Stanford University.

¹²Some international organizations are coming around to the view that anticorruption strategies cannot neglect the moral dimension. A fine example of this is the World Health Organization's attempt to create a framework for better governance in the pharmaceutical sector of its member countries. The global pharmaceutical market is worth some US \$600 billion a year, and the medicine chain is laden with opportunities for abuse and corruption, from the conduct of clinical trials to the filing of patents, licensing of establishments, sale and distribution, public procurement and prescriptions, to name just a few. The World Health Organization's program aims to "reduce corruption in pharmaceutical systems through the application of transparent, accountable administrative procedures and *the promotion of ethical practices*"; emphasis added). It identifies four values as underpinning a framework for good governance in the sector — justice, truth, service to the common good, and trusteeship — and calls for explicit training of officials with a view to enhancing an understanding of the role of such values in the operation of the sector. (For more on the program, see Anello, 2008.)

References

- Ades, A and R Di Tella (1999). Rents, competition and corruption. American Economic Review, 89, 982–993.
- Ala'i, P (2000). The legacy of geographical morality and colonialism: A historical assessment of the current crusade against corruption. *Vanderbilt Journal of Transnational Law*, 33, 877–932.
- Alesina, A and B Weder (2002). Do corrupt governments receive less foreign aid? American Economic Review, 92(4), 1126–1137.
- Ambraseys, N and R Bilham (2011). Corruption kills. Nature, 469, 153–155.
- Andersen, TB, J Bentzen, C-J Dalgaard and P Selaya (2011). Does the Internet reduce corruption? Evidence from US states and across countries. *World Bank Economic Review*, 25(3), 387–417.
- Anello, E (2008). A framework for good governance in the public pharmaceutical sector. Working draft for field testing and revision, World Health Organisation, Geneva.
- Banerjee, A, S Mullainathan and R Hanna (2012). Corruption. NBER Working Paper 17968, National Bureau of Economic Research, Cambridge, Massachusetts.
- Banfield, E (1975). Corruption as a feature of government organisation. *Journal of Law and Economics*, 18, 587–605.
- Bardhan, P (1997). Corruption and development: A review of issues. *Journal of Economic Literature*, 35(3), 1320–1346.
- Bentzen, JS (2012). How bad is corruption? Cross-country evidence of the impact of corruption on economic prosperity. *Review of Development Economics*, 16(1), 167–184.
- Bhattacharyya, S and R Hodler (2010). Natural resources, democracy and corruption. *European Economic Review*, 54(4), 608–621.
- Brademas, J and F Heimann (1998). Tackling international corruption: No longer taboo. *Foreign Affairs*, 77 (September/October), 17–22.
- Brunetti, A and B Weder (2001). A free press is bad news for corruption. Journal of Public Economics, 87, 1801–1824.
- Clausen, B, A Kraay and Z Nyiri (2011). Corruption and confidence in public institutions: Evidence from a global survey. *World Bank Economic Review*, 25(2), 212–249.
- Collier, P (2007). *The Bottom Billion: Why the Poorest Countries Are Failing and What Can Be Done About It.* New York: Oxford University Press.
- Diamond, J (2006). Budget system reform in emerging economies. Occasional Paper 256, International Monetary Fund, Washington DC.
- Dreher, A and M Gassebner (2013). Greasing the wheels? The impact of regulations and corruption on firm entry. *Public Choice*, 155, 413–432.
- Dworkin, R (2010). Corporate campaign finance: The "devastating decision." New York Review of Books, February 25–March 10, p. 39.
- Easterly, W (2006). The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good. New York: Penguin.
- Fan, CS, C Lin and D Treisman (2009). Political decentralisation and corruption: Evidence from around the world. *Journal of Public Economics*, 93(1), 14–34.
- Goldman, MI (2008). Petrostate: Putin, Power and the New Russia. Oxford University Press.
- Governance Matters: Worldwide Governance Indicators. Available online at http://info. worldbank.org/governance/wgi/index.aspx#home (accessed December 9, 2014).
- Gupta, S, H Davoodi and R Alonso-Terme (1998). Does corruption affect income inequality and poverty? IMF Working Paper WP/98/76, Washington DC, International Monetary Fund. Subsequently published in *Economics of Governance*, 3, 23–45, 2002.

- Heineman, BW and F Heimann (2006). The long war against corruption. Foreign Affairs, 85 (May/June), 75–86.
- Hines, JR (1995). Forbidden payments: Foreign bribery and American business after 1977. NBER Working Paper 5266, National Bureau of Economic Research, Cambridge, Massachusetts.
- International Monetary Fund (2013). Energy subsidy reform: Lessons and implications. Washington, DC.
- Johnson, S, D Kaufmann and P Zoido-Lobatón (1998). Regulatory discretion and the unofficial economy. American Economic Review Papers and Proceedings, 88, 387–392.
- Kaufmann, D (1997). Corruption: The facts. Foreign Policy, 107, 114-131.
- Kaufmann, D (2005). Corruption, governance and security: Challenges for the rich countries and the world. In *The Global Competitiveness Report 2005–2006*. Augusto Lopez-Claros (ed.), World Economic Forum, Palgrave Macmillan.
- Kaufmann, D and P Siegelbaum (1996). Privatisation and corruption in transition economies. Journal of International Affairs, 50 (Winter), 419–458.
- Klitgaard, R (1988). *Controlling Corruption*. Berkeley and Los Angeles: University of California Press.
- Landes, D (1998). The Wealth and Poverty of Nations. New York: Little, Brown.
- Leff, N (1964). Economic development through bureaucratic corruption. American Behavioural Scientist, 8(3), 8–14.
- Lopez-Claros, A and S Alexashenko (1998). Fiscal Policy Issues During the Transition in Russia. Occasional Paper 155. Washington, DC: International Monetary Fund.
- Mauro, P (1995). Corruption and growth. Quarterly Journal of Economics, 110(3), 681-712.
- Myrdal, G (1968). Asian Drama: An Inquiry Into the Poverty of Nations, Pantheon.

Noonan, JT (1984). Bribes. New York: Macmillan.

- Nye, J (1967). Corruption and political development: A cost-benefit analysis. *American Political Science Review*, 61, 417–427.
- Rose-Ackerman, S (1975). The economics of corruption. Journal of Public Economics, 4, 187–203.
- Rose-Ackerman, S (1996a). The political economy of corruption causes and consequences. Public Policy for the Private Sector Note 74, World Bank, Washington, DC.
- Rose-Ackerman, S (1996b). Redesigning the state to fight corruption. Public Policy for the Private SectorNote 75, World Bank, Washington, DC.
- Rose-Ackerman, S (1997a). Corruption, inefficiency and economic growth. Nordic Journal of Political Economy, 24, 3–20.
- Rose-Ackerman, S (1997b). Corruption and good governance. Discussion Paper 3, Management Development and Governance Division, United Nations Development Programme, New York.
- Rose-Ackerman, S (1998). Corruption and development. In Annual World Bank Conference on Development Economics 1997, J Stiglitz and B Pleskovic (Eds.). Washington, DC: World Bank.
- Rose-Ackerman, S (2011). Anti-corruption policy: Can international actors play a constructive role? Yale Law & Economics Research Paper 440, Yale University, New Haven, Connecticut.
- Shleifer, A and RW Vishny (1993). Corruption. *Quarterly Journal of Economics*, 108, 599–617.
- Stiglitz, JE (1999). On liberty, the right to know, and public discourse: The role of transparency in public life. Oxford Amnesty Lecture, Oxford.

- Tanzi, V (1998). Corruption around the world: Causes, consequences, scope, and cures. IMF Staff Papers, 45(4), 559–594.
- Tanzi, V and H Davoodi (1997). Corruption, public investment, and growth. IMF Working Paper 97/139, International Monetary Fund, Washington, DC.
- Tanzi, V and L Schuknecht (1997). Reconsidering the fiscal role of government: The international perspective. American Economic Review Papers and Proceedings, 87(May), 164–168.
- The Economist (2008). Hocus-pocus: The real world consequences of producing unreal inflation figures. June 14.
- Trebilcock, MJ and RJ Daniels (2008). *Rule of Law Reform and Development: Charting the Fragile Path of Progress*. Edward Elgar.
- Tullock, G (1996). Corruption theory and practice. *Contemporary Economic Policy*, 14(July), 6–13.
- Van Rijckeghem, C and B Weder (2001). Bureaucratic corruption and the rate of temptation: Do wages in the civil service affect corruption, and by how much? *Journal of Development Economics*, 65(2), 307–331.
- Wei, S-J (2000). How taxing is corruption on international investors? *Review of Economics and Statistics*, 82(1), 1–11.
- World Bank (2012). http://data.worldbank.org/news/world-development-indicators-2012-nowavailable.

World Bank (2013). Doing Business 2015: Going Beyond Efficiency. Washington, DC.

Wrong, M (2009). It's Our Turn to Eat: The Story of a Kenyan Whistle-Blower. HarperCollins.