Forum

CORRUPTION

CORRUPTION: THEORY, **EVIDENCE AND POLICY**

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Given temptation, it is surprising that corruption is not more prevalent. In an environment where wealth is the most important measure of success, can public officials be blamed for wanting to enrich themselves by exploiting their powers? By definition, corruption is: "... acts in which public power is used for personal gains in a manner that contravenes the rules of the game" (Jain 2001, 73). If corruption has been controlled, it is due to the ability of civil society and public institutions to check the behavior of public officials. When unchecked, corruption is accompanied by misallocation of resources, economic stagnation, social and economic disparities and, eventually, political violence. The first decade of this century provides ample casual evidence of these effects. Haiti, with a legacy of corrupt leaders, remains one of the poorest countries in the world; Nigeria, despite its oil reserves, has a stagnant economy; 40 percent of the population in India lives below poverty line while the richest family in the country builds a two-billion-dollar family residence; Tunisia, in spite of respectable growth rates for a number of years, found its corrupt leader unceremoniously overthrown in early 2011.

To understand corruption, we must first recognize what form corruption takes, what allows it to thrive, what consequences it can have on the society and what measures have been successful in controlling corruption.

What is corruption?

Like the heads of Hydra's dragon, corruption presents itself in many shapes though all originate from the same body politic. Forms of corruption differ from one another in terms of both the source of power that

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is exploited and the impact they have on the economy and the society. Let us look at two forms of corruption, each occupying extreme positions on a scale of corrupt activities. At one end is a somewhat benign example, such as a doorman asking for a small tip to let you into the office. At the other end, we find a more malignant example of a leader treating society's assets as personal property.

Most people are exposed to corruption in its benign form when they have to pay a bribe to receive a service from a government official. Quite often, the service would have been a right of the citizen; the bureaucrat may merely have discretion over imposing some costs (in the form of delays and opportunity costs of permit denial) on the citizen before granting the service. A bribe is demanded to reduce that cost. This form of bureaucratic corruption usually occurs once a regulatory regime has been determined and the resource allocation decisions have been made the bureaucrat is, in fact, interfering with the implementation of decisions.

Economic models of bureaucratic corruption must tackle issues of information asymmetry (which agents are corrupt and which will participate in propagating corruption) and uncertainties about costs (associated with probabilities and penalties of detection, as well as with the purchase of loyalties of other agents) in addition to all the usual unknowns such as demand and supply. Rose-Ackerman (1978), Shleifer and Vishny (1993), Dabla-Norris (2002), Ahlin and Bose (2007), Lambert-Mogiliansky et al. (2007), among many others, provide examples of such models. Acemoglu and Verdier (2000) illustrate the role of corruption in governments' attempts to correct market failures.

At the other extreme, "political" or "grand" corruption arises from a rogue dictator's control over a country's resource allocation and expenditure decisions. This leader will maximize his personal wealth rather than the welfare of the population. Of necessity, he will have to have acquired an almost complete control of political powers within the country. A portion of the wealth amassed through corruption is used to purchase the loyalty of those who will help the dictator remain in power and to undermine the



civic society and public institutions that may rise in opposition. This form of corruption leads to a misallocation of resources and an extreme degree of concentration of wealth into the hands of a few. Examples of this form of corruption abound. Zaire's economy stagnated, and the country was left in economic and political turmoil upon the departure of its corrupt leader – Mobutu. In Iraq, Saddam Hussein resorted to corruption in order to prevent the development of civic groups that could oppose his regime. The chaos that followed his departure was due, in part, to a complete vacuum of political institutions in the country.

Some dictators may appear to have a "benevolent" side to them, corruption is accompanied by sharing some of the wealth with the population. Saddam Hussein ensured that Iraqi citizens received education and health care while amassing an estimated USD 10 to 40 billion in personal wealth. During the nearly thirty years of Suharto's dictatorship, Indonesia's GDP increased by almost ten times while he stole an estimated USD 15 to 35 billion from the nation. Using his country's oil wealth, Kazakh president Nazarbayev has created three billionaires within his family while raising the per capita GDP of citizens from USD 700 in 1994 to USD 9,000 at present. It is possible to argue that "benevolence" is really involuntary – that it is merely a reflection of the high cost of purchasing the loyalty of the public and of those who help maintain the corrupt structure. Di Tella and Franceschelli (2009) provide evidence of one such expenditure in Argentina - promises of government advertising revenues to the media in exchange for non-reporting of corruption. A slightly less virulent form of this type of corruption arises when powerful oligarchs ensure that political decisions are in accordance with their economic interests. This may be an accurate description of corruption in contemporary India and Russia (Lamont and Fontanella-Khan 2011). Johnson and Kwak (2010) cite examples from the United States during the eighteenth century.

Political or grand corruption is difficult to model. Most studies have focused on individual cases (such as Klitgaard 1990) and on the context of the persistence of corruption. Exceptions include Charap and Harm (2002) and Jain (1993). We will tackle the issue of persistence of corruption in the following section.

There are many ways to view corruption other than in between the two extremes discussed above. Aidt (2003) provides four ways to differentiate the range of corrupt activities. It is worthwhile to note that we exclude "fraud" and the mere existence of poverty (or worsening of income distribution) as signs of corruption. Similarly, influencing public policy through legitimate routes, whether by providing information or by making political contributions, is not necessarily evidence of corruption. "Political Action Committees" in the United States and similar lobbying groups in other countries have a legitimate role to play in modern democracies. In the same vein, policy decisions that may be directed at specific voting groups, and hence in the personal interest of a politician, are not considered corrupt.

Why does corruption survive?

The conditions for corruption to arise are ubiquitous. Its survival, however, depends upon three conditions.

The first condition necessary for the emergence of corruption is that there be rents associated with a government's regulatory powers. Let us consider the rents associated with the sale of rights to serve the wireless market (A recent corruption scandal in India puts the value of such rents at USD 38 billion in that country). Barring pathologically honest bureaucrats, an entrepreneur will collude with public officials to capture those rents. Potential losers from this exchange, which include competitors and consumers, will have incentives to prevent such sales. A necessary corollary to this condition is that those who lose from such a collusion (between entrepreneurs and corrupt bureaucrats) are not able to organize and do not have access to effective political and legal means to prevent the private sale of public property. Anticipation that well-developed public institutions will coordinate the responses of the losers may prevent corruption from developing in the first place. Foellmi and Oechslin's (2007) model illustrates how corruption exists in imperfect capital markets but not in competitive ones.

The second condition requires that corrupt bureaucracies be somewhat independent within the remaining (if honest) administrative structure of the government. External controls on the bureaucracy – whether imposed by the remainder of the administrative system or by the society at large – must be weak. If some agents seem to get away with acts of corruption, the internal dynamics of a corrupt

bureaucracy will motivate other bureaucrats to expend more effort on increasing the level of their illicit income; some of that effort will have to be spent on ensuring an appropriate redistribution of the illicit income within the bureaucracy. Wade (1985) describes an extreme example of such institutionalization of corruption. Corruption within the irrigation department in one state in India grew to such an extent that the entire effort of administrators was devoted to managing the flow of illicit income rather than on meeting the needs of their clients.

The third condition requires that the public institutions controlling corruption be weak and ineffective. These institutions include civic groups that exert moral pressures, political parties and the media that could expose the wrongdoing, and the legal system that would have the authority to prosecute and punish the guilty.

Societies going through rapid modernization and economic expansion resulting from innovation (industrial or information technology revolutions, for example) are prime targets for corruption. Initial decades of industrial revolutions in most presently-industrialized countries as well as periods of rapid growth in East Asia, China and India have been characterized by high levels of corruption. In all these societies, the possibilities of economic expansion created the fuel for corruption to grow. Britain had more corruption in eighteenth century and America in the nineteenth century than in adjoining centuries. Effective political institutionalization lagged behind economic modernization (Huntington 1968, 59). In both these instances, however, the political modernization that followed was accompanied by a significant decrease in corruption. The development of political institutions increased competition to such an extent that corrupt agents could no longer continue to exercise monopolistic control over the economic growth. Corruption-reducing political modernization, however, is not a foregone conclusion. Bliss and Di Tella (1997) illustrate situations where agents "endogenize" the level of competition and corruption can persist in spite of increased competition.

Measures of economic and social development seem to correlate very strongly with a reduction in corruption (Svensson 2005, 28–29). Treisman (2000) finds a correlation between corruption and a host of other social characteristics, including type of legal system, colonial legacy and religion. While it is clear that the level of corruption in societies with well developed

political institutions is lower, it is difficult to establish the direction of causation. Does development (economic, political or social) cause corruption to decline or is development possible only when corruption declines? One reason we may not have an answer is that researchers have not been able to distinguish between the different types of corruption - two extremes of which were described as bureaucratic and political corruption in the previous section. Most measures of corruption used in empirical studies appear to define corruption as a monolithic entity definable by a cardinal number or a rank. Most commonly used corruption measurements include the Corruption Perception Index by Transparency International, Business International, International Country Risk Guide and the Governance index by the World Bank, which includes a measure of corruption (Jain 2001, 76–77; Treisman 2000, Table A.2). These indices are inadequate if the issue of causation between corruption and social and political indicators is to be addressed.

An important set of agents whose role is not well understood is the intermediaries – those agents who facilitate the conduct of corrupt activities between the clients and the bureaucrats. Bose (2010) argues that these intermediaries may ensure the persistence of corruption while Khanna and Johnston (2007) highlight the role of intermediaries in India in reducing the risks associated with corrupt transactions.

Consequences of corruption

Persistent myths refer to corruption as the second best solution in view of inefficient government regulation or to its role as "the grease in the wheels of commerce". Aidt (2003, F633–35) presents and then demolishes the argument for "efficient corruption". Kaufmann (1998) lays to rest the "grease" argument. While corruption may make one transaction easier, it gives rise to a demand for more corruption – almost like adding sand to the machine, which will then require more grease.

We can say with some certainty that corruption is not good for economic growth. It is quite possible that the two types of corruption identified above have very different effects. Countries marked with bureaucratic corruption could grow as long as the resource allocation process is not influenced by what motivates political or grand corruption – the interests of the decision maker, not the efficiency of the alloca-

tion process. The East Asian Tigers have witnessed a rapid economic growth over the past four decades in spite of corruption. Casual evidence suggests that, for the most part, corruption in that region leads to redistribution of earnings, not to misallocation of investments.

Benign forms of corruption affect the economy much as a tax would. Based on a study of Ugandan firms, Fisman and Svensson (2007) show that corruption reduces firms' growth just as taxation can. Corruption changes prices and, hence, the equilibrium due to shifts in the supply and demand of public services. Political corruption affects growth by influencing decisions on resource allocations, by changing prices and by influencing the availability of resources. In addition, corruption hurts the poor more than the other segments of a society. Since the continuation of corruption requires suppression of those who may oppose corruption, it also inhibits the development of social and political institutions.

Corruption is known to deter investment because it can (negatively) bias an entrepreneur's assessment of the risks and returns associated with an investment (Svensson 2005). Allocation of investment itself will be biased in the presence of political corruption. Corruption may provide incentives to lower public expenditures (Pani 2009) and may encourage investment in large (inefficient) projects with concentrated cash flows (and thus more subject to expropriation) than more efficient maintenance expenditures. Corrupt politicians, for example, encourage the building of new schools rather than funding expenditures that would provide books and supplies for the classrooms. Corrupt officials will direct state and private investment to areas which maximize their returns, not those of the society (Krueger 1993; Alesina and Angeletos 2005).

Serious empirical research on the link between corruption and growth began with Mauro (1995; 1997). Allowing for some differences between the initial conditions of countries, Mauro found a negative relationship between corruption and growth rates, and surmised that worsening composition of public expenditure induced by corruption may play a role. Gyimah-Brempong (2002) and Pellegrini and Gerlagh (2004) validate this relationship after accounting for differences in the initial conditions of countries and their trade openness, political stability or education. Corruption inhibits growth of small and medium enterprises (Tanzi and Davoodi 2001) – firms that usu-

ally make a large contribution to growth in modern economies. Wei (2000) found that foreign investors are deterred by corruption in spite of incentives offered by host countries. Interestingly, he finds that the US's own laws against bribery seem not to have affected the behaviour of US investors. This, as Cragg and Woof (2001) point out, may be because antibribery laws are rarely enforced. Gupta, Mello and Sharan (2001) show that corruption biases public expenditures in favour of the military because, as Hines (1995) has pointed out, high-technology goods of an oligopolistic industry are highly susceptible to corruption.

Corruption introduces distortions in factors markets. It can lower tax revenues (and, hence, funds available for public investments) either because corruption induces inefficiencies in the tax-collection system (Imam 2007) or because corrupt democracies will have incentives to lower tax rates (Pani 2009). Corruption will direct talent away from productive activities towards rent-seeking activities (Murphy, Shleifer and Vishny 1991; 1993). Examining enrolments in engineering and law, Tanzi and Davoodi (2001, 100) find that "...corruption allocates talent in a growth reducing fashion...". Ahlin (2001) demonstrates the effect of bribery on the allocation of talent away from entrepreneurship.

While corruption affects the whole economy, it seems to target the poor. First, consistent with current debate which points to benefits for the poor from economic growth, corruption hurts the poor by lowering an economy's growth rate. Second, corruption introduces costs and benefits that create a bias against the poor (Ahlin and Bose 2007). Third, corruption can be causally linked to the worsening of income distribution.

Corruption reduces poor peoples' access to public goods – a segment of society that perhaps needs those goods more than any other. The poor, because of their limited initial wealth, are not able to pay the bribes required to obtain these services (Foellmi and Oechslin 2007; Kulshreshtha 2007). The Global Corruption Report for 2006 by Transparency International is replete with examples of corruption in health services in countries around the world and its effects on the poor. Mauro (1997) found that government expenditures on education and health were negatively and significantly related to corruption. Gupta, Davoodi and Tiongson (2001) examined a wide variety of social indicators in a sample of 117 countries.

They presented survey as well as statistical evidence that corruption leads to inefficient delivery of government social services.

There is strong empirical support for a relationship between corruption and income distribution. Eliminating the influence of other factors using instrument variables, Gupta, Davoodi and Alonse-Terme (2002) found a significant impact of corruption on the Gini coefficient for income in a sample of 40 countries over 1980–97. "A worsening in the corruption index of a country by one standard deviation (2.52 points on a scale of 0 to 10) increases the Gini coefficient by 11 points, which is significant, given the average Gini value of 39" (p. 40).

Examining the data for a sample of African countries, Gyimah-Brempong (2002, 205) concluded that "...corruption is positively correlated with income inequality in African countries, all things equal. ... (One unit decrease in corruption index) is associated with between 4 and 7 units increase in Gini coefficient of income inequality". Extending the research beyond Africa, Gyimah-Brempong and Munoz de Camacho (2006) demonstrated that different regions of the world are affected differently by corruption. These authors concluded that differences in the impact of corruption are caused by variations in the types of corruption that exist in different regions and countries. This conclusion is based on some implicit assumptions about the types of corruption. Their assumption is that, on the one hand, most African countries suffer from the same type of corruption. On the other hand, the authors conclude that diverse regions of the world, some of which had higher growth rates than Africa despite the presence of corruption, had a different type of corruption. You and Khagram (2005) find some evidence of causation in both directions corruption affects poverty and poverty has some effect on corruption. Using the number of convictions as a measure of corruption, Dincer and Gunalp (2005) find that corruption and inequality are related in the US.

Fighting corruption

Perhaps the most important, and the most difficult, question about corruption is "how can we reduce corruption?" Attempts to fight corruption face a fundamental contradiction: reducing corruption requires the commitment and cooperation of those who benefit from corruption, which is not in their self-interest. In order for a campaign against corrup-

tion to succeed, it will require a strong moral commitment from the segment of leadership that aspires to reduce corruption in addition to sufficient support from the public. There are but a few examples of successful fights against corruption. More often than not, a reduction in corruption accompanies economic growth in open societies, where the cost of corruption begins to exceed the ability of those who benefit from it to purchase compliance from other politicians and bureaucrats.

Hong Kong was able to fight corruption in the 1970s after an Independent Commission Against Corruption was established in 1974. Georgia claims to have reduced its corruption level significantly in recent years. Petty bureaucratic corruption in some states in India has been reduced while political corruption threatens to destabilize the country (Lamont et al. 2011).

Successful campaigns to fight corruption occur along three dimensions. Laws must be strong enough to create a deterrence. It is, however, not enough to have laws on the books - there must be a will to implement them. Although US anti-bribery laws are among the oldest in the industrialized world, they are rarely enforced (Cragg and Woof 2001). China has resorted to capital punishment for certain types of corruption but has not been able to eliminate it. Corruption cannot be tackled without a strong civic society. The population must have powers to challenge politicians and bureaucrats. Governments must agree to introduce transparency in their operations and allow information to flow freely. The "Right to Information Act" in India that allows citizens to demand information from bureaucrats has given much hope to activists in India. While it has been used to fight petty corruption, it has done little to reduce instances of "grand" corruption. Finally, barriers to participation in the economic life of a society must be removed. Corruption has its losers - the population at large and those who are denied participation in economic activity. When those who are hurt by corruption are allowed to voice their discontent, the chances of a decline in corruption increase.

Concluding remarks

Neither corruption nor its study is new. Interest in this subject, however, has become central to the discussion of economic performance over the past two decades. This has followed the realization that corruption may be the biggest barrier to removing poverty in the developing world.

There is very little doubt that corruption hurts societies. For the leaders of societies who engage in corruption, however, the temptation to succumb to corruption far exceeds any moral constraints or compassion for those who may suffer as a result. Constraints on their behavior may have to come from outside – a global leadership that places value on the reduction of poverty and suffering, and the resulting peace dividend. Arriving at that type of enlightened approach is likely to take some time; in the meantime, the best we can do is inform ourselves.

The remainder of this volume of DICE REPORT consists of papers that elaborate on themes introduced in this essay: what forms does corruption take, what causes it, what are its consequences and how can we fight it.

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