World Development Vol. 34, No. 2, pp. 341–348, 2006

Printed in Great Britain
0305-750X/$ - see front matter
ELSEVIER
www.elsevier.com/locate/worlddev
doi:10.1016/j.worlddev.2005.03.011

The Economist's Approach to the Problem of Corruption

PRANAB BARDHAN *
University of California, Berkeley, CA, USA

Summary. — This paper will first distinguish between the non-economist's approach to corruption largely on the basis of public morals and norms and the economist's approach in terms of incentives and organization. I then discuss why otherwise similar countries may end up with different equilibrium levels of corruption, why such equilibria tend to persist, and why corruption in some countries seems to be more damaging to the economy than in others. I then try to derive some policy lessons.

Key words — corruption, methodology, equilibria, costs

Almost everyone is exercised about the pervasive problem of corruption in much of the world, but while most people, including other social scientists, emphasize values and ethics in this context, economists usually take a different approach, emphasizing the need for appropriate incentives and punishments instead.[1] Of course, different people also mean different things by corruption. Most of the time, economists use the notion of corruption as the "use of public office for private gains," and by and large in this paper, I am going to keep to that meaning of the term. Obviously, this is not the only kind of corruption; when you think about the recent corporate scandals in the United States and Europe, they were often cases of abuse of private office for private gains, but the public sector was involved in the sense that it had been lax in the regulations that were supposed to restrain the activities of private actors.

Even in the case of the use of public office for private gains, there are two general kinds of corruption: (i) bureaucratic corruption, which is what much of the literature is about in economics and (ii) political corruption. This distinction is useful for some purposes but not for others, valid in some contexts but not in others. In communist countries (including in China or Vietnam), or one-party authoritarian regimes where there is not much of an effective boundary between the ruling party and the state, the distinction is almost completely blurred. Even in democratic countries where many top bureaucrats are political appointees, not career civil servants, corruption is sometimes hierarchically organized, so that political and bureaucratic corruption are interlocked. Even in countries (like India) where career civil servants, recruited on the basis of service examinations, are technically independent of political parties, sometimes bureaucrats are beholden to the ruling politicians (because the latter can transfer the former to undesirable postings and locations) and even otherwise are voluntarily complicit in the latter's corrupt deals. Particularly, in large government procurements and purchases (often involving various forms of collusion and bid-rigging), cases of corruption usually involve the top politicians, hand-in-glove with the bureaucrats.

Yet there are cases where bureaucratic or administrative corruption is quite different from political corruption in important ways. Particularly in democratic countries where there is an active opposition, politicians face more competition at periodic intervals, whereas civil servants in charge of specialized agencies or administrative departments often face much less competition and public scrutiny. Of course, there are countries with a long history of pervasive and equal-opportunity corrupt politicians of all parties and factions, so that at election time the electorate chooses politicians on other

* Final revision accepted: March 9, 2005.

criteria, assuming all of them to be more or less equally corrupt. Besides, corruption may only be one of the several issues on the basis of which the electorate decides on its choice.

There are countries that have, more or less successfully, controlled bureaucratic corruption, but political corruption is still quite significant. For example, in the United States, bureaucratic corruption is minimal except for occasional cases in police, drug control, housing, and a few other departments, but there is a great deal of political corruption. A large number of laws in the United States are effectively for sale against large contributions to the campaign funds. In developing countries, on the other hand, there is both bureaucratic and political corruption. In India, for example, sometimes the most radical legislation sails through parliament without much opposition from the vested interests, but it is at the implementation stage that it is subverted by them. One should thus keep this distinction in mind between corruption in the process of *enactment* of laws and that in the process of *enforcement* of laws.

Talking of laws, people sometimes use the concept of a corrupt activity and an illegal activity interchangeably. I think there is a distinction; there are many activities that are highly corrupt, but at least by the country's law they are not illegal. The example that I just gave for the United States, of lobbying and contributing the so-called soft money toward certain enactment of legislation by Congresspersons is often legal, and yet it is corrupt by the standards of most people. Just as corrupt things are not necessarily illegal, they are not necessarily immoral either, particularly for people for whom "end justifies means;" so if you bribe a police officer for not torturing a suspect, that kind of corruption has been justified by some people as not immoral.

One of the problems of talking about corruption is that it is not clear how different people measure or quantify corruption. I am not thinking of exact measurements, but to say that this country is more corrupt than that other country uses some measurement judgment. How does one do that? Different people do it in different ways. Some people think about the number of corrupt transactions that take place in a country. Others look at the amount of money that changes hands as part of those corrupt transactions. These may generate different rankings of countries in terms of corruption. You can think of some African country where there may be a great deal of corruption, and yet when you compare that country to say an East Asian country that is also corrupt, the actual amount of money that is transacted in these corrupt deals may be much more in the East Asian country than that in the African country. The reason is that extreme corruption may have already choked off the economy in the African country, so the total amount that changes hands is much smaller than in the East Asian country. Thus, in such comparisons, one has to be very clear about what it is that one is trying to measure.

Many of the standard measures of corruption are really about our perception (e.g., the widely cited country rankings of Transparency International where the reported perception by foreign business people is used). There are many problems with such measures based on perception. One immediate problem that I can think of is that our perception is based on how many corrupt transactions we see around us. We often see in the course of our day-to-day life in developing countries a lot of petty corruption. If you go to India, to any city, in many street corners, where there are traffic police officers, their one hand directing traffic and the other hand often stretched out, all the passing lorries contributing small amounts, piffling amounts; but you see that all the time and you gain a perception about how corrupt that country is. But if you add up all the money that these police officers and thousands like them are collecting in a year, it may not substantially exceed the money that changes hands in one single large corrupt transaction of a country when it buys, for example, fighter aircrafts (in deals made behind closed doors), not to speak of a single defense contract of say, the US Defense Department. Another problem of perception-based measures is also illustrated by the Transparency International data. They are based on the perception of foreign business people whose experience of corruption may be quite different from what domestic business people face in a country. The former may have less insider knowledge about the intricacies of the indigenous bureaucracy and even less patience with its slow processes. So they may end up paying much larger bribes than what the latter settle for at the end of long negotiations and endless cups of coffee in familiar terrain. This discrepancy may vary from country to country and thus bias the results of any statistical analysis or ranking on the basis of this data set. Third, business people often give better ranking in terms of corruption to countries with good economic performance than those with a bad one; this conflation of governance and performance indicators is quite common, and there are some highly corrupt countries (like China) with stellar record in economic performance. Fourth, the rankings usually measure only bureaucratic corruption, not political. Most of these pitfalls of the aggregative corruption rankings are somewhat less in the data that have started being collected at the micro-level; see, for example, Hellman, Jones, Kaufmann, and Schankerman (2000), Di Tella and Schargrodsky (2003), and Svensson (2003).

Let me now go on to the special way economists try to think about corruption as opposed to other social scientists. Cultural anthropologists or sociologists, for example, emphasize social norms and moral values, and increasing corruption is taken as an indication of a sort of moral decay. Economists on the other hand emphasize incentives and organizations. Social norms are very different in different countries. What is considered in one country as corruption may be considered as part of routine transactions in another. It is widely recognized, for example, that in some cultures loyalties to clan and kinship networks take precedence over public duties for a bureaucrat. Now the economists usually point out that though such culture-based interpretations are obviously very important and very realistic in many cases, one has to be careful not to end up with near-tautological explanations, like saying one country is more corrupt than another because its norms are more favorable to corruption. What we need is an explanation of why otherwise similar countries (or for that matter two regions in the same country like northern and southern Italy) may settle with different social norms in equilibrium in say a framework of repeated transactions, and how a country may sometimes shift from one equilibrium into another. And in some countries this may happen quite fast. A major example is Singapore where corruption has been largely eradicated within the matter of a decade or two. Obviously cultural norms do not usually change that fast, but policy changes are likely to have been effective in changing the structure of incentives. Clearly, we are talking about moving from one equilibrium to another. Many economists now have models of what are called multiple equilibria of corruption, and I shall come back to this.

The simplest model of corruption is often the case where there are excessive regulations, and in order to interpret and implement these regulations, the bureaucrats are given some powers of discretion and the bureaucrats use that opportunity to indulge in corruption. In fact, in India, they say that when the bureaucrats are given the discretion to judge "case by case," it ends up as "suitcase by suitcase." But one can see the trade-off between flexibility on the one hand and too much discretion in the hands of the bureaucrats on the other. Sometimes some people think that corruption is a way of bypassing mindless regulations. In fact, the bypassing of regulations usually takes two different forms that have different implications:

—The bureaucrats are bribed to do what they are supposed to do, effectively they just charge a fee when they do their duty.

—The bureaucrats are bribed to do what they are not supposed to do.

These two have differing implications. The first is much more common, the case of so-called speed money, where you pay a fee to move your file faster. The problem is that this may generate perverse incentives for the bureaucrats. Instead of speeding up, it may actually end up delaying, as the bureaucrats have a vested interest in delaying, as with more delay they can extract more money. Also, other bureaucrats may pop up and say you must pay them, otherwise they will delay the file further and so on. And the implicit contract that you have entered into with these bureaucrats is a secret contract, and you cannot go to the court and complain to the judge that these bureaucrats have not kept up their part of the bargain.

The other kind, when the bureaucrats are doing what they are not supposed to do, can be much more insidious. For example, sometimes a customs officer can be paid to look the other way when goods are smuggled, or the tax inspector is paid to look the other way when taxes are evaded. This is particularly insidious because both the briber and the bribee are in collusion so neither has the incentive to report the case, whereas in the former case after the transaction is done you could report to the higher authorities that you had a legal thing done but you had to pay a fee. So this second kind of corruption can be more persistent.

Another distinction that is quite important in the economics literature is the distinction between centralized corruption and decentralized corruption. [2] Everybody knows that the Suharto regime in Indonesia was extremely corrupt, but now after the fall of the corrupt

Suharto family, everybody complains that there is much more corruption. There are similar stories after the fall of the corrupt Soviet regime in Russia. One would have thought that with the reduced regulations and controls of the previous regime in Russia, corruption would decrease. But instead we heard reports about more corruption. Here, I think the distinction between centralized and decentralized corruption is important. One of the main complaints one hears in Indonesia is that formerly one knew which member of the first family (or their associates) you had to pay, and the job would get done. It was centralized. But now, it is a kind of anarchic, fragmentary, decentralized system; you do not know how many people you have to bribe, and after paying at every point you do not know if the job will get done after all. I have heard similar reports about Communist Russia, where one has to pay some designated member of the Party and you get the job done—one can call it one stop shopping. But now you have many stops and have to pay at different points and again you are not sure if the job will get done. There is a coordination problem in decentralized corruption. In centralized corruption, some of the misallocation effects of multiple bribing are taken into account by the centralized bribe takers themselves, whereas in decentralized corruption, everyone acts independently of others, and there are problems of what economists call negative externalities. Similarly, one used to hear stories from Korea, a couple of decades back, when the country was under military dictatorship. People used to ask why Korea had grown so fast when everybody knew that at that time Korea was a highly corrupt country. So why is it that Korean corruption was different? The anecdotes have it that the dictator would ask the conglomerates (*chaebols*) to pay up at some central point, independent of specific government policies regarding their business activities. This was more like "lump-sum taxation," which economists consider the most efficient form of taxation. The scope for arbitrary bureaucratic interference distorting business decisions at the margin was much less. If there is anything to such anecdotes, it shows why this kind of corruption is less distortionary in terms of misallocation of resources and may provide part of the answer to why Korea has grown fast even with a very high level of corruption. The important question here is how the ruler can credibly promise to keep the contributions lump sum, and not come back again for individual *quid pro quo* deals at the margin. This ability to credibly commit is a feature of "strong" states that very few developing countries have.

Going back to the idea of multiple equilibria, there are quite a few models [3] in which corrupt activity depends on how much corrupt activity is taking place all around. This is for several reasons: if everybody else is corrupt you might as well be, particularly when most people assume you to be corrupt anyway and the issue of reputation loss is less salient; also, if many others are corrupt, the chances of your being detected are much less, the chances of meeting a corrupt bureaucrat are also high, and you do not have to search too much to find a briber or a bribee. So, obviously in these cases, what you do depends on what others do. Economists can easily produce models of multiple equilibria, in which one equilibrium can represent low corruption, and another high corruption, in the same country or otherwise similar countries. Now this is where culture plays a role, even in economic models. The prevailing culture is a way of co-ordinating expectations about others' behavior. This is one of the ways in which economists formalize an aspect of culture, which plays a role in equilibrium selection.

Obviously, apart from culture, history matters as it provides a starting point. If you get started with a historical initial condition of high corruption, you may get "locked in" and it is difficult to move into a position of low corruption. The problem is, of course, how to orchestrate this big shift from one equilibrium to another. It is called an equilibrium because small perturbations take you back to that same point.

This brings me to the policy issues that arise in fighting corruption. While non-economists often think about some sort of social movement or moral reform to change "value systems," economists concentrate on incentive systems in tackling these problems. One obvious approach might be that if regulations are what allow corrupt opportunities for bureaucrats, then abolish the regulations. That to me is a rather naive policy recommendation. Yes, there are many stupid or mindless regulations that we should get rid of. Sometimes, though, regulations however mindless they are in implementation had an original social purpose which does not lose value just because the implementation is bad. For example, in many poor countries, there is a public distribution system of subsidized food for the poor, a system that is often riddled with corruption (in the form of diversion of resources by the intermediaries). But the solution is not to abolish the subsidized food distribution system. Given the choice between two highly imperfect alternatives, the poor would often prefer the corrupt system to being thrown open to the mercies of the marketplace, where the price may be higher than even the bribe-inclusive price of the public food distribution system.

To give another example, suppose we want to reduce environmental pollution, and some factory inspectors are hired to monitor factory emissions, and they take bribes. The solution is not to abolish all environmental regulations, as that is not going to help serve the original purpose; we have to think of other ways. Some economists [4] have formulated the problem in the following way. Under the circumstances, suppose you have two policy choices: you can penalize these inspectors if they take a bribe from the factory or you can penalize the factory once some bribery is detected. This is a conceptually important distinction. In most public discussion, much of the focus is on the bribe taker. Many economists have suggested that if you want to pursue your policy objective, you would do better to pursue the bribe giver. (This issue has also come up in the context of western MNCs offering bribes to officials in developing countries, and the OECD trying to enforce some code of behavior on the part of the MNCs.) What happens when you are just punishing the inspectors for taking a bribe? What will be their likely reaction if they keep their job? They will no longer take a bribe, but at the same time they will relax their monitoring efforts; formerly they were zealous in their monitoring job, especially as this was a source of extra income for them, but now with their relaxed monitoring, the factory may pollute more, so by punishing the bribe taker you may end up defeating the original purpose of the regulation. On the other hand, if you concentrate on penalizing the bribe giver, the factory, then that might (although this also depends on circumstances) reduce pollution. Depending on your primary objective, you have to think of a variety of policies, and some of these may be better than others.

One policy suggestion is to introduce incentive pay structure in civil service and in general to run public administration with a smaller number but much more well-paid officials. (In imperial China under the Ch'ing dynasty, district magistrates were paid an extra allowance called *yang-lien yin*—"money to nourish honesty.") Economic theorists use the same idea by calling it "efficiency wage" which is above the market-clearing wage. On the basis of data on wages in civil service relative to those in manufacturing covering 31 developing countries and low-income OECD countries over the period 1982–94, Van Rijckeghem and Weder (2001) find a significant negative relation between relative wage and the corruption indicator of a country. Di Tella and Schargrodsky (2003) estimate in their analysis of micro-panel data from public hospitals in Buenos Aires that a doubling of wages would cause a more than 20% decline in the prices paid by hospitals in procuring basic supplies; monitoring policies act as a complement to raising salaries in curbing procurement corruption. Economists, however, hasten to add that if the disciplining and monitoring mechanisms over the officials are weak and public employees' unions make it very difficult to sack anybody, higher salaries may not reduce the incidence of corruption among officials.

Another important policy suggestion has been to introduce more competition among officers and in the market. Quite often corruption is there because the bureaucrats have a monopoly power, like in India where if you want your passport you can only go to one passport office where the officials have virtual monopoly power over you, and they often do not hesitate in exerting it. In the United States, if you want a passport, you can go to any post office. If someone asks you for a bribe there, you can go to another post office. This kind of competition tends to reduce the incidence of corruption (although it may make some officials lazy). Similarly, it has been found that officers with overlapping jurisdictions also help in corruption reduction. [5] For example, in Singapore at one time there was a lot of corruption in the customs department, but then they introduced a team of officers with overlapping jurisdictions. This (plus the fact that in the beginning they hired a foreign company on a contract job) made collusion more difficult, and corruption went down. There are stories that drug-related corruption in the New York Police Department was checked by the involvement of officers from different agencies (including FBI) with overlapping jurisdictions. The same is the underlying logic for separation of powers. If one branch of the government does not have all the power but there is a system of checks and balances, it may reduce corruption. But there are other cases in which these checks and balances may actually increase corruption; if the system is one of multiple veto powers you may have to pay several people.

Increasing competition may also be achieved through more market competition, for example, through exposure to more foreign trade competition. It has been estimated, for example, that about half of the corruption gap between Austria and Italy (with Italy having higher corruption) could be attributed to the policy of the Austrian government in having more open trade competition. [6] Thus, trade competition and market competition in general may help reduce corruption. As in bureaucratic corruption, one way to mitigate political corruption is to reduce the formidable barriers to entry in electoral politics for new and young politicians posed by the increasingly expensive electoral (and other political mobilization) processes in democratic countries. At least a minimum level of public funding of campaign finances, an encouragement of transparent private contributions to party funds, free and equitable time to all viable candidates on (public and private) television and radio, etc. are the usual suggestions to unblock the entry of less corrupt seekers of political office.

In the context of administrative reform in many countries, there are institutions like ombudsmen or grievance committees where the aggrieved parties can take their complaints, but more often than not these committees do not have the clout or resources to follow through, particularly if the complaints are against politically well-connected officials. Also, such committees usually consider only individual cases and are not authorized to launch large-scale investigations on the general problem of which the individual case may just be the tip of the iceberg. In any case, one general problem in detecting or proving corruption through such institutions is that acts of misallocation of public funds motivated by corruption on the part of bureaucrats are sometimes indistinguishable from outcomes of simple ineptitude on their part. In many acts of corruption, both the briber and the bribee gain illicitly from the non-compliance or evasion of the law so that the complaints have to come from others. So well-established procedures of encouraging "whistle blowers" and guaranteeing their anonymity are very important.

Finally, I want to turn briefly to political accountability. I want to touch on one aspect of accountability that has come up a great deal in the recent literature in economics and this is related to the separation of powers in the context of decentralization of governance, giving more powers to local government. What does it do to corruption? In one way it increases political accountability of the bureaucrats to the local people, as the local government is much nearer to them with a better idea of the needs of the local people, and the latter can monitor it much better. But, on the other hand, it might be easier for the local elite groups or the oligarchic interests to capture local government, while in the central government oligarchic interests from different areas may neutralize one another. (At the central level, more institutional mechanisms for checks and balances are usually at place: these may include various constitutional forms of separation of powers and adjudicatory systems in some countries, more regular auditing of public accounts, more vigilance by national media, etc. which are often absent or highly ineffective at the local level.) So it might be that local governments may be captured much more easily or proximity may make collusion between elite or special-interest groups much easier. Clearly, this varies from country to country and from context to context, [7] depending on the levels of social and economic inequality within communities, traditions of political participation and voter awareness, transparency in local decision-making processes and government accounts, etc., but in principle we have to be wary of this trade-off between more local information and the possibility of easier capture.

In the same context of political accountability, one should also talk about the role of organizations outside government, NGOs, the press and other media, etc. For example, in India, there has been a movement around the issue of freedom of information. NGOs (like the Mazdoor Kisan Shakti Sangathan in Western India) have vocal movements where they mobilize villagers to demand information in public hearings on government bills, vouchers and muster rolls in development projects and public works, where there is rampant corruption. Faced with this demand, the obstructive bureaucrats in this part of India often used to cite the Official Secrets Act of 1923, which they had inherited from the British. Active movements like this and investigative journalism in the press can be very important in playing the role of watchdogs in our continuing fight against corruption. The control over the media by politicians (as in Italy or Russia) or by corporate interests (as in the United States) often thwarts these necessary vigilance functions.

It is important, however, not merely to unearth and publicize egregious cases of political or bureaucratic corruption, but also in some cases to dispel disinformation, to highlight credible cases where the automatic and cynical presumption of the local people that the officials are corrupt turns out to be gross exaggerations, thus cutting down on the feedback effects of rumors and designs of middlepersons. Nothing perpetuates corruption like exaggerated perceptions of corruption all around. Beyond the stage of information collection and awareness raising among the local people, the NGOs also have an important role in pursuing cases of public interest litigation against corrupt officials or political leaders in countries where there is an independent judiciary (in India, for example, the higher-tier courts, partly induced by media attention, have been very receptive to such public interest litigation). However, corruption cases being difficult to prove in courts (or when judges themselves are susceptible to corruption), it is sometimes useful for local social organizations to use sanctions against local officials through various local social and cultural mechanisms, particularly in cases where corruption is locally observable but unlikely to be verifiable by an outside judicial authority. In general, by tireless and sustained public campaigns to raise the social and political penalties of malfeasance, a critical mass of opportunist officials and politicians have to be convinced over a long enough period that corruption is not cost effective. This is a long and uphill battle, but well worth fighting.

NOTES

1. For a survey of the main economic issues, see Rose-Ackerman (1978, 1999) and Bardhan (1997).

2. This point has been emphasized in Shleifer and Vishny (1993).

3. One of the early models is that of Andvig and Moene (1990).

4. See, for example, Mookherjee and Png (1995).

5. This has been emphasized by Rose-Ackerman (1978, 1999).

6. See Ades and Di Tella (2001).

7. See some case studies in Crook and Manor (1998), Conning and Kevane (1999). For a review of the various issues of decentralization and corruption see Bardhan and Mookherjee (forthcoming).

REFERENCES

Ades, A., & Di Tella, R. (2001). Rents, competition and corruption. *American Economic Review, 89*(4), 982–993.

Andvig, J. C., & Moene, K. O. (1990). How corruption may corrupt. *Journal of Economic Behaviour and Organisation, 13*, 63–76.

Bardhan, P. (1997). Corruption and development: a review of issues. *Journal of Economic Literature, 35*, 1320–1346.

Bardhan, P., & Mookherjee, D. (forthcoming). Decentralization, corruption, and government accountability: an overview. In Ackerman-Rose, S. (Ed.), *Handbook of Economic Corruption*. London: Edward Elgar Publishing.

Conning, J., & Kevane, M. (1999). *Community-based targeting mechanisms for social safety nets*. Washington, DC: World Bank.

Crook, R., & Manor, J. (1998). *Democracy and decentralization in South Asia and West Africa*. Cambridge: Cambridge University Press.

Di Tella, R., & Schargrodsky, E. (2003). The role of wages and auditing during a crackdown on corruption in the city of Buenos Aires. *Journal of Law and Economics, 46*(1), 269–292.

Hellman, J. S., Jones, G., Kaufmann, D., & Schankerman, M. (2000). Measuring governance, corruption, and state capture. Policy Research Working Paper, World Bank, Washington, DC.

Mookherjee, D., & Png, I. P. L. (1995). Corruptible law enforcers: how should they be compensated? *Economic Journal, 105*, 145–159.

Rose-Ackerman, S. (1978). *Corruption: A study in political economy*. New York: Academic Press.

Rose-Ackerman, S. (1999). *Corruption and government: Causes, consequences and reform*. Cambridge: Cambridge University Press.

Shleifer, A., & Vishny, R. (1993). Corruption. *Quarterly Journal of Economics, 108*, 599–617.

Svensson, J. (2003). Who must pay bribes and how much? evidence from a cross section of firms. *Quarterly Journal of Economics, 118*(1), 207–230.

Van Rijckeghem, C., & Weder, B. (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*(August), 307–332.