Corruption: Supply-side and Demand-side Solutions

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Politicians, businesspeople, academics, and journalists display an uncommon unanimity when they condemn corruption as probably the single biggest obstacle to India’s continued economic growth. And with good reason: studies show that countries can reach middle-income levels despite some corruption, but further growth requires much better institutions. India is exactly at this juncture; therefore better governance in general, and cleaning up corruption in particular, are crucial matters for restarting reforms and reviving growth. China, and some other emerging economies, are also in a similar situation, and are starting to make efforts to improve their institutions. If India does not follow or even lead with similar reforms, foreign firms will take their business to these other countries that offer greater security of property and contract, hurting India’s export trade and making it harder to attract foreign direct investment.

Most of these experts also agree that the government should tackle the problem by tightening laws, mandating harsher punishments, and enforcing them better, perhaps through new independent organizations. In this paper I argue that there are other avenues to combat corruption, which can usefully accompany and complement government action.

1 This is the text for a lecture to be delivered on 6 February 2013 at the Indira Gandhi Institute of Development Research. An earlier version was presented at the Delhi Economic Conclave on 14 December 2012. I thank Lisa Bernstein, Kala Hoff, Raghuram Rajan and Dani Rodrik for their perceptive comments on the first draft, but retain sole responsibility for the arguments and views expressed here.

I want to emphasize at the outset and as strongly as I can that my suggestion will not eliminate corruption. First, it is limited to one aspect, namely bribery by business firms in pursuit of government contracts or licenses. It does not touch other aspects such as harassment bribes extorted by police or bureaucrats from ordinary citizens.3 It does not directly deal with corruption within the government, for example to secure appointments or promotions to lucrative positions, nor with grand corruption that buys laws favoring entrenched special interests in business. Second, even within its limited domain, my proposal will not achieve anywhere close to 100% success. It is not a panacea; there are no panaceas.4 But the problem of corruption is sufficiently important and urgent to justify exploring all potential solutions and starting with imperfect ones. Waiting for a 100% solution to emerge only guarantees getting 0%.

I also emphasize that I do not intend my proposed institution to replace the usual machinery of anti-corruption laws and their enforcement. The two can usefully coexist and be mutual complements or synergistic; indeed I will argue that the business-community based institution that I suggest will need some specific kinds of support from the formal state legal and regulatory institutions.

As we know from basic economics, every transaction has a supply side and a demand side. Corruption is no different: the demander of a bribe is an official who has the power to offer a government contract, to issue a license, or to allocate some scarce resource, and the supplier is a businessperson who wants these favors. Legal

3 The insidious and harmful pervasiveness of such harassment and extortion is brilliantly described by Katherine Boo in Behind the Beautiful Forevers, New York: Random House, 2012.

sanctions can target both sides, but the government’s power extends most directly over its own officials. Therefore the demand that "the government should act to eliminate corruption" usually means that officials who demand and take bribes should be better detected and more harshly punished by the apparatus of criminal law. My new idea is for the business community itself to target the supply side.

Community-based Institutions in Other Contexts

First let us place the problem of corruption in a broader context of economic governance. This is not always provided in a top-down manner by governments; much historical, empirical, and theoretical work shows how business groups can devise self-sustaining institutions of governance bottom-up. Elinor Ostrom's Nobel-prize-winning research shows how communities of producers can solve collective action problems to manage common resource pools. The work of Avner Greif and others shows how, throughout history and in many countries even now, non-governmental social institutions step in to provide enforcement of private business contracts when the state fails to play its part.

5 Kaushik Basu's idea, namely that suppliers of harassment bribes should be offered immunity from prosecution if they turn whistle-blowers, serves the purpose of facilitating the punishment of the officials who demand the bribes, and therefore is basically a demand-side solution. This idea proved very controversial; fortunately my argument is quite different so I don't need to get into that controversy here.


I now briefly describe this work and derive some implications for controlling corruption. Begin with Greif. Consider a community whose members have frequent occasions to interact with other members for business purposes. Many of these deals turn into prisoners' dilemmas: after the fact, one or both parties to the agreement have the temptation to renege and extract greater benefit for oneself at considerable cost to the other. If the formal legal system is working well, they can write a contract whose terms forbid such cheating, and expect to get the contract enforced in the event of a dispute. But if the formal legal system is corrupt, biased, inexperienced, or defective in some other way, they need an alternative contract enforcement mechanism. Otherwise fear of the partner's cheating may deter the people from entering into the deals in the first place. Many mutually beneficial opportunities will go unexploited, and business will grind to a halt. Therefore the business community as a whole has a strong motive to establish and sustain a high-quality contract enforcement institution, even though (in fact because) each member faces a temptation after the fact to evade enforcement.

The typical method of private ordering of contracts in a business community stipulates ostracism as the punishment for violating the group's norm of conduct. If A cheats B, the whole community punishes A on B's behalf by refusing to have any dealings with A in the future. Ostracism, which essentially puts the miscreant out of business, can be even more effective than legal fines as a deterrent to A's cheating. Of course at some future time some other member C may discover a profitable opportunity to pursue jointly with A. For the threat of ostracism to be credible, this possibility must be anticipated and countered. The solution is to regard C's dealing with an ostracized A as itself a violation of the community's norm of conduct, requiring the rest to ostracize C.\(^8\) (And similarly for anyone who deals with C ...)

Game-theoretic analyses show that conformity to such a norm can be an equilibrium

\(^8\) This is similar to the "honor code" at West Point and some US universities (including Princeton): the faculty do not monitor examination rooms; instead, students are supposed to report anyone they see violating the rules, and any failure to report is itself a violation of the honor code.
if the group’s members have sufficient regard for the future. In reality such codes work reasonably well - not 100% of the time, but then nothing in real life is 100%.

Ostrom’s studies and meta-analyses led her to identify several conditions for successful self-governance of common pool resources. "In all self-organized systems, we found that users had created boundary rules for determining who could use the resource, choice rules related to the allocation of the flow of resource units, and active forms of monitoring and local sanctioning of rule breakers.” In other words, the rules, and to whom they apply, must be clear and clearly understood, and violation of rules must be monitored, and effective sanctions applied, by the participants themselves.

Success of the Greif-type private contract enforcement order depends crucially on accuracy and speed of information about any violation of the norms, and communication of the facts to all members of the business community. According to Greif, the Geniza merchants (Maghribi traders) in their institution of governance of mutual agency relationships achieved these ends using their letters to other merchants, where they could describe any misconduct by their agents. In modern times, most local business communities have social organizations like Rotary Clubs where they meet to network and gossip, as well as more formal means like Better Business Bureaus where customers can post comment and evaluations about members. Web sites like eBay and Amazon that organize markets have

\[ \text{\footnotesize \text{\textsuperscript{9}} A rigorous but technical proof goes as follows. In the many-player repeated game of the business community, each player in each deal must have enough surplus or profit to offset the benefit he could get by a one-time cheating. If A has cheated, and C offers to deal with him, A’s temptation to cheat C to take the one-time benefit is greater because he is already ostracized by the rest and therefore has less to fear about the future. Therefore C would have to offer A more surplus to stay honest than if he chose a partner who did not have a history of cheating. Therefore C would only lower his own payoff by violating the norm. This is what sustains ostracism as a Nash equilibrium. See Greif, op. cit., Proposition 3.2 on p. 77.} \]

\[ \text{\footnotesize \text{\textsuperscript{10}} Nobel Prize lecture cited above, p. 419.} \]
formalized and refined such rating systems. On the whole these arrangements work well, although of course some participants try to manipulate and distort the evaluations.

Community-based Collective Action Against Corruption

How would this apply to the context of corruption? As with private contracts, the business community as a whole has much to gain by eliminating corruption. In a clean system of governance, contracts and licenses go to the most efficient user; this increases investment and output, and thus benefits the group as a whole. But in a corrupt system, even if the most efficient firms can afford to pay the highest bribes, the need to do so reduces their profits and generates some unnecessary additional uncertainty. That hurts investment and growth, and everyone has to bear some of this cost. What can the business community do to help reduce corruption?

Anyone who wins a government contract or license or a scarce resource must, in order to utilize it and make a profit, engage in business dealings with many others: builders, suppliers of equipment and materials, lenders and providers of trade credit, advertisers, retailers, accountants and auditors, and so on. If the community is able to sustain a norm whereby none of its members does any business with anyone who has given a bribe, the person or company that wins the contract or license or resource through bribery will be unable to use whatever he has won, so there will be no point in giving the bribe in the first place.

Thus my proposal is for the business community to take matters in its own hands, and establish a norm of conduct and sanctions for its violation, that will deter any member from giving a bribe. This institution operates entirely on the supply side of would-be corrupt deals with any government officials who demand bribes. It can operate on its own, regardless of any punishment the law may have on its books for taking (or giving) bribes, but in practice for it to work well the two institutions --
formal laws of the state and private ordering by the business community -- should coexist, and the deterrence each provides should reinforce the other.

For this ostracism institution to work, requirements similar to those Ostrom and Greif found in their contexts must be fulfilled: clear and clearly understood rule or norm of conduct, effective monitoring for any violation of the norm, and effective sanctions against violators. Let us consider them in turn.

The rule itself is very simple: no bribes shall be given in pursuit of any dealings -- contract, license etc. -- with any government agency or official. To be effective, this must be a simple bright-line rule. Any loopholes, allowing small gifts or meals, will make it hard to judge violations and therefore lead to more such ambiguous violations. Gifts to relatives of officials must also be deemed improper.

To whom does the rule apply? To anyone who seeks government business or a license or permit from a government agency. The person need not be a member of the business association or similar formal organization that enforces the sanctions. However, the association must publicize widely the fact that its members will refuse to do any business with anyone, member or non-member, who is judged by the association’s tribunal to have won a government permit or contract through bribery, or with anyone who does business in violation of this sanction. Then non-members will be left with no doubt about the consequences of bribery, and cannot later claim that the ostracism was a surprise and therefore unfair.

Next come the requirements of monitoring, adjudicating, disseminating the findings of adjudication, and enforcement of sanctions. Can the business community in India build the necessary information and communication networks? Let me offer some thoughts; insider experts can surely improve upon them.

India has several well-established business associations. Confederation of Indian Industry, Federation of Indian Chambers of Commerce and Industry and
Indian Merchants’ Chamber are probably the largest and most comprehensive; there are also local and industry-specific groups, and networking associations like local chapters of Rotary and Lions Clubs. These associations have web sites, publications, and events for networking. These provide an excellent basis for news to disseminate quickly. There is also a good basis for insider knowledge; I am sure the capabilities of members and non-members are sufficiently well known to other businesspeople in their local communities, that if someone wins a government contract the others will quickly figure out whether the winner has plausible ability to win on merit. Any suspicion can be investigated formally or informally. The associations can even infiltrate informants in government departments, who can discover and report on suspected corrupt practices. Leaders of the community can then hold internal hearings to come to a judgment and issue verdicts of sanctions against miscreants.

Internal industry-based tribunals have some great advantages over formal courts of law. They have expertise to evaluate information, therefore they can use some items that would not meet the standards of evidence in a criminal court. And their ultimate sanction of ostracism, which puts the miscreant out of business altogether, can be an even better deterrent than the fines a court would levy. The value of such private ordering has been amply proved for private commercial contract disputes. Its use for exposing and punishing corruption would be a bold and potentially valuable extension.

11 In the jargon of information economics, they can use information that is merely observable, not verifiable, while law courts insist on verifiable information.

Further requirements

The proposed anti-corruption institution will have to fulfill some conditions in addition to those emphasized by Ostrom and Greif. Most importantly, it must have active support and participation from the largest businesses. Economic theory of collective action tells us that the largest players are the ones who take the lead in private provision of public benefits. In the context of corruption, the pioneers who refuse to bribe and refuse to have any business dealings with anyone who bribes will suffer some loss of business until the norm takes hold. But the largest businesses are in the best position to suffer the temporary loss, and may also have the most to gain from establishment of a cleaner system.

Large conglomerates are relatively more self-sufficient, and less dependent on transactions with outside firms. This is a double-edged sword in the context of an anti-bribery institution. On the downside, such conglomerates are less deterred by the threat of ostracism, and may continue to bribe. On the upside, they can, at a minimal cost to themselves, implement ostracism against other firms which depend heavily on doing business with these giants. For both these reasons, it is important to sign up the large conglomerate enterprises for the scheme at the earliest stage. This is helped by the fact that to the extent that their size and scope is the result of greater efficiency, they stand to benefit most from a system that prevents other less-efficient firms from winning contracts through bribery. This reinforces the general argument for the role of large players in achieving collective action.

Next, it is essential to avoid false accusations. Firms that lose in competitions for contracts or licenses may be tempted to bring such accusations against rivals in the hope of getting them ostracized and eliminating competitors. Therefore the tribunal that investigates accusations must be, and must be seen to be, competent

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and impartial. The most respected business elite must take the lead in ensuring that such is the case. But the scheme should also include a strong component of participation from the broad spectrum of the community, to assure everyone that it is not an insiders’ clique designed to keep out newcomers.

False accusations can be made less likely if the tribunal acts like a regulatory agency, or an investigating magistrate in the European or civil law tradition, listening to complaints but initiating investigations itself, and not like a judge in the common law tradition, giving firms total freedom to act like plaintiffs filing lawsuits against more successful rivals. Moreover, the tribunal should have the power to levy penalties, including ostracism in extreme cases, against firms who bring accusations that prove blatantly false.

The system must also have some acceptance or forbearance from courts. A firm that has been ostracized could in principle sue other firms for refusing to deal with it. This is made somewhat less likely by the fact that by doing so it will attract more attention to the original misdeed that led to the ostracism. Also, I don't think there is any legal requirement for any firm to do business with any other specified firm. However, courts can often interpret facts and laws in complex ways; it is important that they do not try to second-guess industry experts, following the same practice as they largely do in matters of commercial arbitration.

Start-up problems

Up to now I have discussed the working and requirements of business-community-based anti-corruption institution in a settled or ongoing state. Now I turn to additional issues that arise in getting such a system started. The main problem is that we cannot start from a clean slate; different firms have different
initial positions, including stakes in the status quo. Some have built up knowledge of how to operate in the corrupt system, contacts with bureaucrats and the mutual trust that is needed to sustain a corrupt relationship, and so on. If corruption were eliminated, all this is "specific capital" would be worthless and the advantage these firms enjoy over outsiders would disappear. Therefore such firms will resist reforms. Of course they will not confess the true reason for their opposition; instead they will offer all kinds of plausible arguments that appeal to public interest, or at least sufficiently broad special interests such as regional or other equality or fairness, or fear of foreigners. Worse, there is some risk that established large firms enjoy advantages in the current system at the expense of small or new firms; therefore they may be unwilling to provide the leadership role needed for collective action of the kind I am proposing.

However, not all large and established firms or business elite reach or sustain this status through corruption. Many technology giants in India have from the outset emphasized their squeaky-clean governance and operations. Some conglomerates may have in the past benefited from their insider relationships with politicians and bureaucrats in the license raj, but some or all of their operations have now become so efficient that they can prevail in a corruption-free environment. Indeed they should now prefer a clean system, because in a corrupt system they face the added downside risk that someone else will defeat them through corruption when they would have won in open competition. If enough such respected figures and their firms sign up as the starting coalition for my proposed system, that will put pressure on others, because not signing will be seen as a very bad signal about their practices and intentions. They will be trapped into joining, even though they would have liked it better if the institutional reform never got launched.

14 In economics jargon, we are not starting behind a Rawlsian veil of ignorance where no one knows which position they will occupy in the proposed arrangement.

15 See my paper “Clubs with entrapment,” American Economic Review, 93(5), December 2003, 1824-1829 for a model of such a process.
The role of culture

The proposed norm -- that no firm should deal with any other firm that has been ostracized for corruption, nor with any firm that has violated this norm, and so on to infinity -- can be sustained by its own expectations, because any firm contemplating violation recognizes a sufficiently large probability of being punished. However, a situation where no one conforms to the rule can also be an equilibrium, because then no one expects to be punished for the violation. The good equilibrium can be selected and sustained if an anti-corruption culture prevails in the group, in the sense that the norm of "no bribery" is broadly accepted and that is commonly known. The honor codes at Princeton, West Point etc. mentioned in footnote 8 are supposed to be sustained in just this way by a culture of honor in the student community. Greif's multilateral or collectivist institution of contract enforcement has a stronger sustaining device. Suppose A has been ostracized for previously reneging on a contractual obligation, and B discovers a good business opportunity with A. Then A has less to fear from cheating B, because he is already ostracized and can suffer no worse punishment. B would have to offer A an especially good deal to keep him honest in an insufficiently repeated bilateral relationship. Therefore B finds it more costly to violate the ostracism norm and deal with A than to deal with a third member C in good standing. Abiding by the norm is positively desirable to any one member given that others are abiding by it. 

I believe my proposed non-bribery norm falls somewhere between these two cases. If contract governance functioned well under the formal legal system in India, then dealing with someone who has been ostracized for bribery would not pose any significant risk of being cheated in the contractual relationship. But such is not the case; contract governance has a substantial collectivist norm-based component.

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16 In this context "common knowledge" is a technical term; it means that everyone knows, everyone knows that everyone knows, and so on to infinity.

17 Footnote 9 gives a more rigorous statement.
Therefore dealing with someone already ostracized for bribery raises the risk of being cheated in the same way as in Greif’s system, and the stronger incentive to abide by the norm carries over.

In other words, business-community-based relational governance for contract enforcement can reinforce and improve operation of the business-community-based anti-corruption institution. Of course culture can further strengthen this. And if a culture of no-bribery starts to develop in business-government interactions, it can spread to other areas (mentioned below in the section on limitations) that are not directly within scope of the proposed institution, yielding further benefit to society.

Other government action

The government can support the norm-and-sanction based, supply-side governance of the business community in more positive and direct ways, using measures that work on the demand side as well as the supply side of corruption. Much has been said and written about detection and punishment. Let me offer an idea that has been advocated for other reasons, but has a useful role to play in reducing the harmful effects of corruption: one-stop shopping. Whenever any economic activity such as setting up a new corporation or construction of a new plant requires multiple licenses or government actions, they should all be channeled

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18 Such complementarity between different functions of a relational governance institution is observed in other contexts also. For example, in Lisa Bernstein’s studies cited above, the business communities of diamond and cotton dealers also have social ties among their families, and threats of social ostracism strengthen the punishment of business ostracism in deterring opportunistic behavior in contracts. Associations like Rotary and Lions Clubs provide business networking and matching to their members, and a threat of cutting off access to these services can reinforce their role as private order institutions to ensure good behavior in contracts between members; see Qiuyu Julia Xu, "On the quality of search and governance in a relational network," Senior Thesis, Princeton University, 2006.
through one office; once an investor or a firm has this office's clearance, no other agency or official in any capacity should be able to hinder it further.19

This arrangement, which exists in some cities and states in the U.S. and in some countries like Indonesia, has obvious advantages of saving administrative and transaction costs.20 Its side-benefit in dealing with corruption arises by analogy with the idea in industrial economics that mutually complementary goods are better sold as a package by a monopolist than separately by oligopolists. As an example, consider hardware and software, both of which are needed by computer users. Suppose the two items are sold separately. If the hardware seller firm raises its price, that makes the hardware-software package more expensive and therefore reduces the demand for it. This hurts the sales of software and therefore reduces the profit of the software firm. The same is true for the software firm's pricing decision. Each firm has no reason to take into account this harmful effect on the other; therefore both raise prices too far. If both items were sold by the same firm, it would recognize the interactive effect on its overall profit; in economists' jargon it would "internalize the externality." It would set prices lower, raising the quantity it sells of both items. This would benefit not only the consumers, who would get their computers and software at a lower price, but also the firm, which would make more total profit; after all, that is the reason why it lowered the price.

Now apply this idea to the context of corruption when several licenses are needed to start a business or construct a plant. If each license is handled by a separate corrupt office, each demands a high bribe, ignoring the negative side-effect on the take of the others. In a one-stop shop where this effect is internalized, each


applicant would pay a lower total bribe for the package of licenses. That would lower the overall cost of entering the business or constructing the plant, thereby increasing the number of applicants and the level of economic activity. Incidentally, it would also increase the total amount paid as bribes by all the applicants together, so this is one reform that should not encounter opposition from the officialdom!

Just as complements are better sold by a monopolist, substitutes are better sold (from the point of view of the consumer or of efficiency in the economy as a whole) by separate oligopolists, because they will compete fiercely with each other. For example, computerization of the Indian railway ticketing system has given travelers the ability to buy tickets from anywhere, and the bribes that had to be paid at the ticket window have disappeared. In our context, there could be two or more distinct offices, each a one-stop-shop empowered to issue the whole package of licenses. Their competition can keep down the cost of the package to the consumer, that is, lower the bribe, perhaps reduce it close to zero.

Limitations

My scheme concerns interactions between business and government. Therefore it does not directly address bribery and other influence activities that exist entirely within government agencies, for example to secure appointments and promotions, and assignments to positions with power to administer valuable contracts and licenses. However, to the extent that success of the scheme makes many of these sought-after government and agency offices less lucrative, it can indirectly reduce within-government corrupt practices as well.

Corruption affecting ordinary citizens in their dealings with bureaucrats and the police also remains outside the scope of the proposed institution. This includes harassment bribes extracted for things such as driving licenses or benefits in kind to which people have perfectly good entitlement, and extortion based on threats of
arrest and prosecution, which remain major problems. But even partly successful reform in business-government dealings may plant the seed of a cultural shift that makes such extraction or extortion less feasible.

Even within the realm of business-government interactions, the focus is on one specific aspect, namely bribery to win licenses or contracts. It does not include grand corruption, where the whole legislative process is captured for the interests of specific industries or firms. This is an area where lobbying shades into political contributions and outright bribery. In a democracy people have a right to lobby politicians; indeed the U.S. constitution guarantees this right. Therefore drawing a line between legitimate lobbying and illegal bribery will always be difficult.

However, in matters of award of government contracts and licenses, the main problem of corruption in India seems to be at the level of execution and bureaucracy rather than the level of legislation, so grand corruption may be less of a problem for my limited purpose.

Challenge to research and action

Even within all these limitations of scope, a no-bribe-giving rule with ostracism sanctions enforced by the business community, or any other scheme on its own or in combination with others, is not going to eliminate corruption completely, but that is no reason not to take some steps to reduce it. In practical policy making one must recognize that nothing is perfect, and we should accept partial improvements while continuing to seek larger ones. Unattainability of 100% success (or anywhere close to it) should not become an excuse for staying with 0%.

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21 The first amendment states: "Congress shall make no law ... abridging ... the right of the people peaceably to assemble, and to petition the Government for a redress of grievances."
I have not offered a fully fledged scheme ready to roll out tomorrow; far from it. I have sketched a basic idea, pointed out some problems it must overcome, and suggested how this might be done. There are surely other difficulties that further study will reveal. But I believe that instant dismissals -- "It will never work in India; the country is just too complex; the problem is just too rampant." -- are mistaken. At the minimum, a good case exists for continuing to think further and deeper, to examine whether and how the difficulties can be countered, ameliorated, or overcome. Allow me to offer this as a research program, or even throw this down as a challenge, to the Indian business community and to academic researchers in Indian business schools, law schools, and economics departments.