How Business Community Institutions Can Help Fight Corruption

Avinash Dixit, Princeton University
Motivation

Corruption is a complex problem; needs attack from many angles and dimensions. Most policies focus on demand side, and formal legal system: police and courts, or special government agency, to catch and punish officials taking bribes. Asymmetric policies, including clemency or reward for givers of harassment bribes.

Basic difficulty: many politicians and officials, and perhaps govt as a whole, gains from corrupt system, so governmental demand-side anti-corruption effort lacks incentive, meets internal opposition.

Conversely, business community as a whole loses from corruption: Direct loss of profit; further loss by reducing incentives, investment. But individual firms can gain at expense of others by bribing officials. Prisoner’s dilemma for community; needs collective action to resolve.
Focus here: supply side, and non-governmental, business community institution
to detect and punish (by ostracism) givers of bribes for govt licenses, contracts ...

Motivation: winner of license, contract needs dealings with others:
suppliers, subcontractors, trade credit, banks, marketing, ...
If ostracized, firm loses much of value of license, so pointless to win it.
Ostracism also hurts future business; can be harsher penalty than court fine.

Related business community institutions: to enforce contracts
Greif’s Maghribi traders, Bernstein’s diamond merchants, ...

Community efforts to counter corruption, improve corporate governance:
Zero-Rupee Note movement against petty bribery in India
AddioPizzo movement in Sicily to resist Mafia’s extortion
Governance improvement leadership by Infosys etc. in India.
Advantages of business community effort:

- Use local / industry knowledge to facilitate detection, conviction
- Belonging to organization makes it safer to resist demands for bribes;
  - officials know that any retribution will put them against whole community.

Result from model:

- Such an institution, in combination with formal government apparatus
  - can substantially reduce, sometimes eliminate, corruption.

In practice, added difficulties of launching system, shifting equilibrium

- Should not expect close to 100% success, but even 50% or 25% is
  - better than 0%, which would be the result of waiting, doing nothing.
Model: Without business institution

\( L = \) value of one-period license, exogenous, same for all firms

\( p_0 = \) probability of getting license without bribery

\( p_b = \) probability of getting license by bribery

\( B = \) amount of bribe demanded

\( \pi = \frac{p_b}{p_0}, \quad \beta = \frac{B}{L} \)

\( D(\beta, \pi) = g \beta + h (\pi - 1) = \) probability of detection by formal institutions of law or by investigative journalists, whistleblowers etc.

\( F = \) fine (monetary equivalent of punishment) of bureaucrat if detected

Bureaucrat's expected payoff:

\[
EP = D(\beta, \pi) (-F) + [1 - D(\beta, \pi)] \beta L
= - [g \beta + h (\pi - 1)] F + \{1 - [\beta + h (\pi - 1)]\} \beta L.
\]

Firm (without any business institution) willing to pay bribe if:

\[
p_B (L - B) \geq p_0 L, \quad \text{or} \quad \pi \geq \frac{1}{1 - \beta}
\]
Figure 1: Bureaucrat’s Payoff Contours (acceptable region shaded)
Figure 2: Willingness to Pay Bribe without Institution (shaded region)
Figure 3: Outcome without Institution
Only way to eliminate corruption without business institution:
  Corner solution at $\beta = 0$, $\pi = 1$.

This requires willingness-to-pay frontier flatter than
  bureaucrat’s iso-expected-payoff frontier at that point, which becomes

\[ \frac{F}{L} > \frac{1}{g + h} \]

Most we can expect is $g \approx 2$, $h \approx 0.1$: sure detection if
  bribe = 1/2 of license, or favoritism factor = 10.

Then need $\frac{F}{L} \geq 0.476$, seems difficult to achieve
Model: With business community institution

If a firm complies with bribe demand,

\( q = \) probability of justified detection and conviction by community tribunal

\( r = \) probability of wrongful conviction

\( \delta = \) discount factor, \( V = \) present value of firm.

On conviction, values of \( L, V \) to firm fall to \( \theta L, \phi V \)

Firm willing to comply with bribe demand if

\[
V = (1 - q) \left[p_B (L - B) + \delta V\right] + q \left[p_B (\theta L - B) + \delta \phi V\right] \\
\geq (1 - r) \left[p_0 L + \delta V\right] + r \left[p_0 \theta L + \delta \phi V\right]
\]

This simplifies to

\[
\pi \geq \frac{l}{k - \beta}
\]

where \( l = [1 - r (1 - \theta)] \left[1 - \delta + \delta q (1 - \phi)\right] / [1 - \delta + \delta r (1 - \phi)], \ k = 1 - q (1 - \theta) \)

so \( k < 1; \) also \( q > r \) ensures \( l > k, \) or \( l/k > 1. \)
Figure 4: Willingness to Pay Bribe with Institution - region shrinks
Figure 5: Corruption-free Outcome with Institution
Numerical calculation for corruption-free equilibrium:

\[ q = 0.25, \ r = 0.1 \]
\[ \theta = \phi = 0.1 \]

These imply \( l = 2.773, \ k = 0.73, \ l/k = 3.799 \).

Then empty intersection if \( F/L > 0.086 \),

much lower than the 0.476 without business institution.

Further issues discussed in paper, omitted here:

\( p_b \leq 1 \) imposes additional constraint, creates corner solutions etc.

With non-empty intersection, partial reduction in corruption (Figure 6).
\[ \pi = \frac{l}{k - \beta} \]

Figure 6: Partial Reduction in Corruption
Other considerations outside model

Launching the institution

Need some of the most senior, respected business leaders to become launch members, publicly support and urge others to join.

Boundaries of association

Sanction of ostracism must apply to all firms, not just formal members. Very important that association not be an insiders’ clique or oligopoly, keeping out new, innovative firms. Should have outsiders, new firms represented on adjudication tribunal.

Detection mechanisms

Local, inside knowledge is crucial. Should also use proactive strategies to locate, expose corrupt officials and so help formal system.
Graduated sanctions
In practice, harshest sanction should not be applied immediately.

   This will also help reduce the risk arising from false accusation, conviction.

Official recognition
Courts should respect tribunal’s verdict, not re-hear cases.
Government can align its approved bidders’ list with association’s
   list of members in good standing.

Maintaining reputation
Like formal anti-corruption agencies, association must remain scandal-free.

   Expect attacks from businesspeople, officials who are gaining from corruption.
   Watch out for false accusations, counter these at once.
   Maintain good relations with media, public.
Concluding Comments

Much more thinking, discussion needed
    to identify other issues, difficulties, opposition the scheme will meet
    and how and how far these can be overcome.

But theoretical analysis so far seems encouraging start:
    shows that the supply-side private institution can greatly strengthen
    the operation of demand-side formal legal anti-corruption efforts.

I hope businesspeople and academics will engage in such thinking, discussion
    and pave the way to actual experiments, implementation.
Figure 1: Bureaucrat’s Payoff Contours (acceptable region shaded)
Figure 2: Willingness to Pay Bribe without Institution (shaded region)
\[ \pi = \frac{1}{1 - \beta} \]

Figure 3: Outcome without Institution
Figure 4: Willingness to Pay Bribe with Institution - region shrinks
Figure 5: Corruption-free Outcome with Institution
\[ \pi = \frac{l}{l(k - \beta)} \]

Figure 6: Partial Reduction in Corruption