Corruption and Monitoring

EE461 - Lecture 10

2/2015

Chayanee Chawanote

Corruption: Basic Model

- One government produces homogenous good, such as a passport, or a right to use government resources
- Demand curve from private agents: D(p)
- An official (seller) has the opportunity to restrict the quantity of the good that is sold.
- The government official is a monopolist. His objective is to maximize the value of the bribes collecting from selling this government good.
- Let p be the official government price of this good.
- What is the marginal cost to the official of providing this good?

Corruption without theft vs. with theft

- Without theft:
  - The official turns over the official price of the good to the government
  - MC = p
  - Corruption raises the total price of the good.
- With theft:
  - The official does not turn over anything to the government
  - The price that the buyer pays = bribe, could be lower than the official price
  - MC = 0
- Equilibrium: set MR = MC (see figure Ia and Ib)

Corruption without theft vs. with theft

- Think about bribes as commodity taxes
- Without theft, the bribe is equal to the revenue-maximizing commodity tax when marginal cost is equal to the state price p. The difference is that taxes are kept by the government rather than the officials.
- Penalizing the official for corruption changes the level of the bribe, but does not change the essence of the problem.
  - If the probability of detection and the penalty are independent of the bribe and of the number of people who pay it, the official will charge the same bribe provided that the penalties are not so high that corruption is no longer profitable.

Impacts of Corruption

- We can define corruption as the use of public office for private gain.
- Hence, we can see that corruption acts like a tax, adding to the cost of providing public services and conducting business.
- Corruption is costly due to secrecy. The demands of secrecy can shift a country's investments away from the highest value projects (health and education) into potentially useless projects (defense), if the latter offer better opportunities for secret corruption.
- It also causes leaders to maintain monopolies, to prevent entry, and to discourage innovation by outsiders.
- Corruption may be a major contributor to the low growth rates of many developing countries (Mauro 1995).

Approaches to reducing corruption

- Becker and Stigler (1974): use the combination of monitoring and punishments
  - Argument: individuals who do the monitoring and enforcing punishments may themselves be corruptible.
- Alternative: increase grassroots participation by community members in local-level monitoring
  - Supportive argument: community members benefit from a program, so they may have better incentives to monitor than disinterested central government bureaucrats
  - Drawbacks: free-rider problem as monitoring is a public good; local elites dominance

Monitoring corruption: Evidence from a field experiment in Indonesia

- Olken (2007) conducted a randomized, controlled field experiment in 608 Indonesian villages
- These villages were about to start building a village road as part of a nationawide village-level infrastructure project.
- Method 1: randomly select some villages to be told that their project would be audited by the central government (top-down monitoring)
- Method 2: two experiments on grassroots participation
  - randomly distribute hundreds of invitations to village meeting to villagers
  - anonymous comment from villagers relaying any report without fear of retaliation

Treatment and control in the field experiment

TABLE 1
NUMBER OF VILLAGES IN EACH TREATMENT CATEGORY

	Control	Invitations	Invitations Plus Comment Forms	Total
Control	114	105	106	325
Audit	93	94	96	283
Total	207	199	202	608

NOTE.—Tabulations are taken from results of the randomization. Each subdistrict faced a 48 percent chance of being randomized into the audit treatment. Each village faced a 33 percent chance of being randomized into the invitations treatment and a 33 percent chance of being randomized into the invitations plus comment forms treatment. The randomization into audits was independent of the randomization into invitations or invitations plus comment forms.

Measures of corruption

- Many studies use perceptions-based measures of corruption (by Transparency International Corruption Index)
  - This is indirect measure
- This study compares two measures of the same quantity: before and after corruption taken place
  - Before: what engineers estimated actual cost to build the road after the project was completed
  - After: what the village claimed the road cost
  - The difference = missing expenditures measurement

Findings

- Substantial reductions in missing expenditures for government auditing
- However, more project jobs were given to family members of project officials $\rightarrow$ alternative forms of corruption
- Smaller average reductions in overall missing expenditures for the participation experiments
- But, the interventions did raise community participation in the monitoring process: openly discuss about corruption problems
- Anonymous comments reduce missing expenditures only when the comment forms were distributed entirely via village schools (preventing elites influence)