

## ECONOMIC GOVERNANCE 1 – GENERAL CONCEPTS AND EMPIRICAL STUDIES Avinash Dixit, Princeton University

### WHAT IS ECONOMIC GOVERNANCE?

The concept of governance has exploded into fashion over the last 3 decades. Here are the numbers of papers that mention it in the title or abstract (data from EconLit):

1970-79: 3, 1980-89: 112, 1990-99: 3825, 2000-05: 7948

Attempted definition – support of economic activity and economic transactions by protecting property rights, enforcing contracts, and taking collective action to provide the needed physical and organizational infrastructure. So about interactions among distinct economic entities.

Contrast with corporate governance – various agency problems to do with corporations (shareholders v. managers, hierarchies of management and workers) and their resolution by explicit or implicit contracts, incentive schemes etc.

But the two are connected because the boundary of a firm is itself endogenous (Coase, Williamson). For example, if governance of arm's length contracts is poor, that raises transaction costs of using the market and therefore favors integration - vertical for transactions in intermediate inputs, and horizontal, vertical, or conglomerate for internal financing. (This can explain the large family-owned conglomerates in LDCs). This "governance perspective" on firm size and scope can provide many interesting research questions, e.g. Costinot on int'l trade.

*Governance* is not always undertaken by a country's *government*.

Governments do provide many institutions and organizations of governance, and their failure to do so, or poor quality of these provisions (e.g. corruption) is a major cause of poor economic performance in many countries. But private institutions of governance do exist, sometimes in niches that the government serves poorly or not at all, and sometimes because they have advantages of expertise or information over the government's institutions.

It is important to understand these alternative institutions:

[1] for businesspeople trading with, or investing in, countries or industries where informal institutions are the main providers of property right protection or contract enforcement,

[2] for LDC and transition economy governments, when establishing or reforming their own institutions of property and contract, and for western countries or international organizations advising these governments on these matters, to ensure that the formal institutions interact well, not dysfunctionally, with the existing private institutions,

[3] for understanding mixed systems that prevail in most economies incl. advanced.

Issue is not "market vs. government," but how governmental and other social institutions interact to support economic transactions, which may or may not be in conventional markets.

#### Institutions of Governance

Formal – Constitution, legislation, policing, courts, regulatory agencies, ...

Informal – [1] Social networks for search and information

[2] Norms of behavior, and sanctions for enforcement against violations of norms

[3] Private adjudication and enforcement (non-profit or for-profit)

These link to all social sciences: Eco, Pol, Soc, Anthro, Hist, Law; also to Evolutionary Biology

## ISSUES AND TAXONOMIES

### CATEGORIES OF ECONOMIC SITUATIONS & TRANSACTIONS NEEDING GOVERNANCE

- a. Predation: One-sided, involuntary. Pertains mostly to property rights.  
Not just theft but other violations of property rights, especially intellectual property.  
Special problem – government or its agents may themselves be the predators
- b. Mutual insurance and gift-exchange (so far less studied from governance perspective)  
Transfer in one direction at one time, with non-specific obligation to reciprocate  
Non-specificity makes these hard to govern; need very close relation or a dominant party  
Example – Don Corleone’s gift to the undertaker
- c. Borrowing and lending, selling for delayed payment, selling experience goods.  
Transfer occurs in one direction at one time, with specific obligation to reciprocate.  
This is the classic one-sided prisoner’s dilemma – Hobbes, Williamson, Greif etc.
- d. Trade, exchange of goods or services for other goods or services or money  
Transfer in both directions, so two-sided prisoners' dilemma, matched from population  
Exists in all economic transactions except purely spot exchanges  
Example – Gambetta’s cattle rancher and butcher
- e. Contribution to provision of public goods, or preservation of common property resources  
Multi-person prisoners’ dilemmas. Examples – Ostrom’s case studies

### COMMENTS

Taxonomies are conceptual categories to help analysis. In reality they often overlap or blur.  
Difference between property right protection and contract enforcement - [1] involuntary versus voluntary “transaction”, [2] stock versus flow (not always; contracts can be about stocks).

## CATEGORIES OF INSTITUTIONS OR MECHANISMS OF GOVERNANCE

### 1. First-party

Operating on potential miscreant's own value system to induce good choice of action

Often ignored by economists but very important in reality

Norms of behavior where the reward to compliance or punishment for deviation are internalized by individuals, or instilled by society into them during education or socialization.

These can be moral or social imperatives. S-C Kolm's useful distinction - if after violating the norm you feel guilty, that is moral; if you feel ashamed, that is social.

### 2. Second-party

(Others who are in the same community or network of transactions)

Bilateral and multilateral methods of communication and punishment

Bilateral preferable; so parties try to develop relationships, invest in reputation etc.

Multilateral – others in group inflict punishment on behalf of previous victim

Problems of communication and action can both have public good problems

### 3. Third-party

(Others who are no direct part of this class of transactions)

Converts one-shot game of two parties into repeated game of each with the third party

Subcategories

(i) Provision of information that then becomes an input to second-party enforcement

Examples: Credit and quality certification agencies. Gambetta's Don Peppe.

(s) Private adjudication and enforcement under the shadow of formal law

(e) Direct enforcement for profit by the third party. Gambetta's Don Peppe.

(g) Enforcement by governmental or quasi-governmental bodies.

## A SMALL SAMPLE OF CASE STUDIES (ANALYTIC NARRATIVES), A FEW KEY FINDINGS, AND RELATION TO THEORY

### 1. THE SICILIAN MAFIA (Bandiera, Gambetta, Repetto)

Informal institutions, especially organized crime, emerge to fill niches left vacant by formal ones

Mafia - between collapse of feudalism and emergence of Italian state

Now protect and enforce transactions in illegal activities, tax evading transactions

Similarly Yakuza grew immediately after end of World War II

Sicilian mafia initially protected property rights (landowners hired former feudal lords' guards and even tough bandits); then expanded into enforcing private contracts

Protection by organized crime creates negative externality

When some properties are known to be protected, risk for others increases

So mafia can extract excessive fees; optimal for it to leave some unprotected

Monopoly protector may be better than "cutthroat" competition among would-be protectors

Lower survival probability implies low discount rate; harder to sustain honesty

This may have been a problem in Russia

Mafia may itself engage in activities that it protects

This is question of vertical integration - make or buy. Can take transaction cost approach.

Italy - mafia started as protectors, then expanded "downstream" (Gambetta)

US - other way round (Repetto)

## 2. MERCHANT GUILDS AS PROTECTORS AGAINST KING'S (STATE'S) PREDATION

(Greif, Milgrom and Weingast)

Expansion of trade in medieval Europe depended on  
protecting merchants' property against state's coercion or predation of foreigners

Organized groups of merchants (guilds and similar institutions)

could threaten a coordinated withdrawal of trade from a predatory ruler

Bilateral game between a ruler and one merchant would not work because  
individual merchant's future business would not be sufficiently valuable to the ruler

Multilateral but uncoordinated enforcement would not work because

each trader has incentive to violate embargo, and rulers would encourage this

With coordination, guilds solved the collective action problem of participation in the embargo

by simultaneously putting in place sanctions against members who cheated

Relate to Abreu's idea of penal codes in repeated games

Such a well-functioning institution also benefitted the rulers

by increasing the volume of trade in their city or market

So rulers would facilitate the organization and functioning of such guilds

(This is typical of moral hazard problems – people want to make

ex ante commitments to behave well, but ex post wish to cheat

and regret having made those commitments.)

Related very basic question in political economy of regime / constitution design:

How to give the rulers enough power, but not too much.

Research by Myerson, Egorov-Sonin, etc.

### 3. VARIOUS COLLECTIVE ACTION PROBLEMS

Delineating and enforcing property rights (Ellickson, Libecap)

Governing common resource properties (Ostrom)

Key issues - information and enforcement

Information, usually best available locally to the participants themselves -

[a] about identities of participants (insiders)

[b] about allocation and nature of rights, and rules of conduct (what is permissible)

[c] about consequences of infraction or violation of rules

[d] about history of members' conduct

Question of incentives to convey information and do so truthfully

Enforcement -

A may need to punish B because B previously cheated C

When punishment is costly to A, enforcement is itself a collective action problem

Need to rely on instinct, or honor code

Punishments are usually gradual, contrary to the "grim trigger strategies" of game theory

Rules, incentives and information need to be well adapted to each other

Example - [a] Fisheries rarely have quantity quotas. They have procedural rules:

specify permissible times, locations, and technologies for fishing,  
requirements that fishing be done in teams. All these are easier to monitor.

[b] Victims of transgressions have the best incentives to monitor.

But they should not have incentives to make false allegations.

So permission to retaliate by destruction may work better than by taking.

#### 4. RELATION-BASED VERSUS RULE-BASED ENFORCEMENT (Greif, 1997)

Two types of societies:

- (1) "Collectivist" - family, ethnic, or religious groups, communities
  - Exchange occurs only between pairs of members of one group
  - Enforcement is multilateral, through relations and informal institutions of norms, communication, and sanctions
- (2) "Individualist" - social groups may exist, but
  - Transactions occur across groups between strangers
  - Enforcement is bilateral, through specialized institutions and organizations

Maghribi (collectivist) and Genoese (individualist) traders in Mediterranean  
Maghribis informed others in the group about any cheating, and ostracized cheaters  
This was successful within the initial scope of trade, but could not expand  
because they could not find enough group members to migrate to new places  
Genoese able to expand more flexibly because they  
"developed formal organizations to support agency relationships and exchange"  
(1) formal registration of contracts and bookkeeping requirements  
(2) specification of default obligations if undocumented loss of another's property  
(3) making a cheater's family members responsible for his embezzlement.

Theoretical explanation: Li

Collectivist = relation-based governance, Individualist = rule-based governance  
Former has low fixed cost but high and rising marginal cost  
Latter has high fixed cost (legislation, setting up legal system), then low marginal cost  
So former better for small scales; latter for large scales



## Further issues:

[a] Problems of transition: Arranging collective action; Lock-in by vested interests, etc.

Possible solution - Community responsibility system (Greif, 2004)

Traders in late medieval Europe traveled from their communities to others

They were not personally known outside their own communities,

but others could know their community identity by clothes, speech etc.

If person P from community C cheated someone from another community C' ,

then C' held C responsible to make restitution

Then C could conduct its own investigation to identify P and punish him appropriately

So communities are players in repeated game; each is formal enforcer within its boundary

Today partnerships and firms have some of the same role as the medieval communities

Also possible applications for expanding the scope of microlending etc.

[b] Transition never complete; relation-based multilateral systems

retain role in advanced economies (Bernstein)

Committees or tribunals of industry experts investigate and adjudicate complaints

Their expertise enables them to interpret incomplete or ambiguous evidence

better / faster / cheaper than can general-purpose courts of law

If their rulings are defied, they can put the miscreant out of the business

These communities also have social ties; so ostracism provides an additional punishment

Formal courts recognize these advantage and may also enforce arbitration rulings.

When the system is working well, actual instances where cheating occurs are few,

(default is more likely for reasons of financial hardship than for genuine intent to defraud)

and ones where adjudicator's ruling is defied and punishment invoked are very rare.

- [c] To better mitigate *within*-group conflicts (prisoners' dilemmas), the group must make outside options worse: set up or worsen *across*-groups conflict.  
Conversely, when introducing formal governance into an existing informal system, temporary worsening of informal system as incentive constraint tightens.  
Traditional property rights may render formal rights ineffective (Ensminger)
- [d] In relational governance, partner's honesty is sometimes best detected from unavoidable expressions, not actual actions  
This fits with Spence's signaling idea - signals can achieve separation of types if "bad" type has greater cost of sending the signal than "good" type  
With unavoidable expressions, the cost of mimicking is infinite  
Gambetta and Hamill case study – how taxi drivers detect potential bad customers  
This may explain businessmen's lengthy initial social interactions  
They are learning to interpret each other's microexpressions  
Foreigners from rule-based systems don't understand this and get impatient
- [e] More generally, firms from one LDC investing or trading in another understand the general nature of relational governance institutions better than do firms from western / northern countries with rule-based institutions  
Therefore cross-LDC trade and investment may have certain advantages
- [f] Traders, investors from informal systems better able to deal with formal systems than vice versa; the latter may do well to use intermediaries  
Intermediaries can profit from the special skill of being able to work with one foot in each  
Examples: Li re. Hong Kong, also Rothschilds, Morgans in 19<sup>th</sup> century

## 5. PRIVATE, FOR-PROFIT ENFORCEMENT

(Milgrom-North-Weingast, Gambetta)

Same pair of individuals interact rarely, so no bilateral basis for repeated game equilibrium

Everyone interacts every period with intermediary, so such basis for those pairings

Private intermediary charges fee for information about history of behavior of prospective partner and/or for inflicting punishment in response to partner's current cheating.

Gambetta's mafiosi perform both functions. Fee for enforcement service is higher. Why?

Greater cost and risk are supply-side reasons.

But the mafiosi have territorial monopoly, and can price above cost.

So should find demand-based reasons.

More basic question: without external authority (formal court etc.),

what guarantees the intermediary's honesty? (MNW are vague on this point.)

May double-cross one side in exchange for extra fee (bribe) from the other.

Must be a reputation or repeated interaction motive.

Occasional matches between actual transactors,

but regular repeated game of each with the intermediary.

### SUMMING UP

Very rich collection of facts, raising many interesting questions

Some obvious; don't need formal modeling. Others benefit from formal modeling.

Will look at some models of varying degrees of completeness, success in Nos. 2, 3

But much remains available in these case studies for further theoretical exploration.

## BIBLIOGRAPHY

- Oriana Bandiera, "Land reform, the market for protection, and the origins of the Sicilian Mafia: Theory and Evidence", *Journal of Law, Economics, and Organization* 19 (2003), 218-244.
- Lisa Bernstein, "Opting out of the legal system: Extralegal contractual relations in the diamond industry", *Journal of Legal Studies* 21 (1992): 115-157.
- Lisa Bernstein, "Private commercial law in the cotton industry: Creating cooperation through rules, norms, and institutions", *Michigan Law Review* 99 (2001): 1724-1788.
- Arnaud Costinot, "On the Origins of Comparative Advantage", UCSD working paper, September 2006. Available at <http://www.econ.ucsd.edu/~acostino/research/papers.htm>
- Avinash Dixit, "On Modes of Economic Governance", *Econometrica*, 71(2), March 2003, 449-481.
- Avinash Dixit, "Trade Expansion and Contract Enforcement", *Journal of Political Economy*, 111, 2003, 1293-1317.
- Robert Ellickson, *Order Without Law: How Neighbors Settle Disputes*. Harvard U. Press, 1991.
- Jean Ensminger, "Changing property rights: Reconciling formal and informal rights to land in Africa. In *The frontiers of the new institutional economics*, ed. John N. Drobak and John V. C. Nye, 165-196, San Diego, CA: Academic Press.
- Diego Gambetta, *The Sicilian Mafia*, Harvard U. Press, 1993.
- Diego Gambetta and Heather Hamill, *Streetwise*, Russell Sage Foundation, 2005.
- Avner Greif, "On the interrelations and economic implications of economic, social, political, and normative factors: Reflections from two late medieval societies." *Frontiers of New Institutional Economics*, eds. J. N. Drobak and J.V.C. Nye, Academic Press, 1997.
- Avner Greif, "Impersonal Exchange without Impartial Law: The community responsibility system," *Chicago Journal of International Law*, 5, Summer 2004, 108-136.
- Avner Greif, Paul Milgrom, and Barry Weingast, "Coordination, commitment and enforcement: The case of the merchant guild", *Journal of Political Economy*, 102 (1994): 745-776
- Shuhe Li, "The Benefits and Costs of Relation-based Governance: An Explanation of the East Asian Miracle and Crisis," *Review of International Economics*, 11, 2003, 651-67.
- Gary Libecap, *Contracting for Property Rights*. Cambridge University Press, 1989.
- Paul Milgrom, Douglass North, and Barry Weingast, "The role of institutions in the revival of trade: The law merchant, private judges, and the Champagne fairs." *Economics and Politics*, 2(1), March 1990, 1-23.
- Elinor Ostrom, *Governing the Commons*, Cambridge U. Press. 1990.
- Thomas Repetto, *The American Mafia: A History of Its Rise to Power*, New York: Holt, 2004.