

Issues in Economic Systems and Institutions

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1 Course Description

Even relatively unregulated market economies do not operate in a vacuum. Transactions and contracts arise in a specific institutional setting, encompassing the legal and political system, corporate and social structure as well as cultural norms. Many relevant decisions are not mediated through a price system, e.g. allocations within a firm, verdicts delivered by a jury, job references provided by professors, etc. The way these systems and institutions are designed may significantly affect resource allocation and outcomes. The purpose of this course is to examine the linkage between institutions and economic performance.

I will focus on developing a theoretical framework to study these issues. The main tool used is game theory, especially games of incomplete information.

2 Grading

Grading will be based on: a final exam (70% weight) and internal evaluation (30%). For the latter, students can either take a midterm or present the main ideas of a selected paper to the class and participate in discussion. You can present a published or working paper containing original research, a literature survey on a specific issue or even your own work, if you are so inclined. I will give you a list of suggested papers to choose from. If you want to present something outside the list, you are welcome to show me what you have in mind and get it approved. The presentation project will be done in teams of two or three members, depending on class size.

3 Syllabus

The literature on the subject is vast. I will focus on some interesting areas and try to give you a flavour of the issues, rather than try to be exhaustive. The course is based on a selection of papers, some of which I will discuss in detail, and others I will treat more cursorily by extracting their essential point or expressing them through highly simplified models, eschewing many of the complications tackled in the original papers. Most papers discussed will be of a theoretical nature, but we will supplement them with empirical studies to illustrate and support some of the main ideas. The list is provisional; I may add or drop material as we go along.

3.1 Incentives and Motivation

To achieve high productivity, economies must not only harness resources and technology but also motivate agents to work hard, produce innovation and make good use of their creative energies. Successful institutions and economic systems are those which manage to create strong incentives for their members. What is the key to motivating people to perform up to their potential? We will go beyond standard moral hard theory to examine some deeper issues connected with job performance. We will study the theory of teams, talk about non-monetary motivations such as pride and reputation, analyze the optimal design of contracts and try to understand the role of leadership in team performance.

- Bengt Holmstrom: “Moral Hazard in Teams.” *Bell Journal of Economics*, 1982. Vol 13(2), 324-40.
- Benjamin Hermalin: “Toward an Economic Theory of Leadership: Leading By Example.” *American Economic Review*, 1998. Vol 88(5), 1188-1206.
- Roland Benabou and Jean Tirole: “Intrinsic and Extrinsic Motivation.” *Review of Economic Studies*, 2003. Vol 70(3), 489-520.
- Roland Benabou and Jean Tirole: “Incentives and Prosocial Behavior.” *American Economic Review*, 2006. Vol 96(5), 1652-78.

3.2 Communication

Formal contracts and monetary compensation are absent in many kinds of institutional settings, but agents may nevertheless try to influence each other through verbal or written communication, or by producing data or evidence to support their case. Interactions in legislatures, corporate boards, court rooms, international bodies like the United Nations, etc. fall within this category. Cheap talk games study to what extent information can be credibly conveyed when informed and uninformed players have some conflict as well as some commonality of interest. Revelation games study what can be learned when verifiable evidence can be produced by some players, but also suppressed if it does not serve their interest. We also examine how decision making power should be assigned in organizations when information is not available to everyone. In the process, we will gain some understanding of concepts like delegation and decentralization.

- Vincent Crawford and Joel Sobel: “Strategic Information Transmission.” *Econometrica*, 1982. Vol 50(6), 1431-51.
- Marco Battaglini: “Multiple Referrals and Multidimensional Cheap Talk.” *Econometrica*, 2003. Vol 70(4), 1379 - 1401.
- Wouter Dessein: “Authority and Communication in Organizations.” *Review of Economic Studies*, 2002. Vol 69, 811 - 838.
- Rick Harbaugh and Theodore To: “False Modesty: When Disclosing Good News Looks Bad.” Mimeo 2006, Kelley School of Business, Indiana University.
- Paul Milgrom and John Roberts: “Relying on the Information of Interested Parties.” *Bell Journal of Economics*, 1986. Vol 17(1), 18 - 32.

3.3 Norms, Expectations and Coordination

Individual and social behaviour are inextricably linked—each shapes the other. The scope for opportunistic behaviour can lead to serious inefficiencies, such as the tragedy of the commons. The existence of a strong state which protects property rights or enforces contracts

can mitigate the problem, but poor, underdeveloped societies often lack good governance. However, social norms founded on the principle of reciprocity—good behaviour is rewarded by good behaviour, and bad behaviour is punished in the same coin—can curb opportunism and sustain efficient arrangements to some degree. We will study how such mechanisms work, what their limitations are and how modern institutional innovations like microfinance can exploit these forces. We will also examine problems involving coordination and collective action.

- Avner Greif: “Contract Enforcability and Economic Institutions in Early Trade: The Maghribi Traders’ Coalition.” *American Economic Review*, 1993. Vol 83(3), 525-48.
- Parikshit Ghosh and Debraj Ray: “Cooperation in Community Interaction without Information Flows.” *Review of Economic Studies*, 1996. Vol 63(3), 491-519.
- Maitreesh Ghatak and Timothy Guinnane: “The Economics of Lending with Joint Liability.” *Journal of Development Economics*, 1999. Vol 60(1), 195-228.
- Kevin Murphy, Andrei Shleifer and Robert Vishny: “Industrialization and the Big Push.” *Journal of Political Economy*, 1989. Vol 97(5), 1003-26.
- Stephen Morris and Hyung Song Shin: “Unique Equilibrium in a Model of Self-fulfilling Currency Attacks.” *American Economic Review*, 1998. Vol 88(3), 587-97.

3.4 Information Aggregation

Our behaviour is often shaped by observing the behaviour of others, since others may possess information relevant to our decisions. The problems where such interdependence arises may involve private choices (e.g. which movie to watch or what stock to buy) or collective ones (e.g. who to vote for or whether to join a club). Solving for optimal choices and their informational value to other agents is a subtle problem which requires game theoretic analysis. In the process, however, we can gain insight into how apparently irrational crowd behavior such as financial bubbles or panics, trigger happy juries or inept committees is possible even under assumptions of individual rationality. We can also identify situations where individuals with limited knowledge can still generate a “wisdom of crowds.”

- Justin Wolfers and Eric Zitzewitz: “Prediction Markets.” WP 10504, NBER, 2004.
- Austen-Smith, David and Jeff Banks: “Information Aggregation, Rationality and the Condorcet Jury Theorem.” *American Political Science Review*, 1996. Vol 90, 34 - 45.
- Feddersen, Timothy and Wolfgang Pesendorfer: “Convicting the Innocent: the Inferiority of Unanimous Jury Verdicts.” *American Political Science Review*, 1998. Vol 92, 23 - 35.
- Sushil Bikhchandani, David Hirshleifer and Ivo Welch: “A Theory of Fads, Fashion, Custom and Cultural Change As Informational Cascades.” *Journal of Political Economy*, 1992. Vol 100(5), 992 - 1026.

3.5 Reputation

People often worry not so much about immediate gains and rewards but how their choices may affect their image and consequently their long term prospects. A related problem is where individual behavior shapes the reputation of a group, and vice versa. We will study ways of modeling interactions with a significant reputational component and see how it enhances cooperation in some scenarios but produces inefficiencies in others. Scope for application of these ideas is broad, including worker motivation, social conformity and discrimination.

- Steven Morris: “Political Correctness.” *Journal of Political Economy*, 2001. Vol 109(2), 231 - 65.
- David Scharfstein and Jeremy Stein: “Herd Behavior and Investment.” *American Economic Review*, 1990. Vol 80(3), 465 - 79.
- John Knowles and Nicola Persico: “Racial Bias in Motor Vehicle Searches.” *Journal of Political Economy*, 2001. Vol 109(1), 203 - 229.
- Nicola Persico: “Racial Profiling, Fairness and Effectiveness of Policing.” *American Economic Review*, 2002. Vol 92(5), 1472 - 97.

- Steven Coate and Glenn Loury: “Will Affirmative Action Eliminate Negative Stereotypes?” *American Economic Review*, 1993. Vol 83, 1220 - 40.

3.6 History

Economic performance can be improved by redesigning institutions appropriately. Decentralization can lead to more informed decision making, microfinance improves on traditional banking by tapping into social capital, democracy may stall progress unless appropriate transfers among citizens can be arranged. These are some of the lessons learnt in previous sections. However, history often casts a very long shadow in the sense that customs, practices and institutions from a distant past may have a lasting effect on behaviour and outcomes long after they have disappeared. For example, the kind of colonial history a country has or its agricultural past may influence gender roles or productivity even today. We will discuss some recent empirical papers which seem to identify such long term effects.

- Daron Acemoglu, Simon Johnson and James Robinson: “The Colonial Origins of Comparative Development: An Empirical Investigation.” *American Economic Review*, 2001. Vol 91(5), 1369-1401.
- Abhijit Banerjee and Lakshmi Iyer: “History, Institutions and Economic Performance: the Legacy of Colonial Land Tenure Systems in India.” *American Economic Review*, 2005. Vol 95(4), 1190-1213.
- Alberto Alesina, Paolo Giuliano and Nathan Nunn: “On the Origins of Gender Roles: Women and the Plough.” Working Paper 10798, NBER, 2011.
- Raghavendra Chattopadhyay and Esther Duflo: “Women as Policy Makers: Evidence from a Randomized Policy Experiment in India.” *Econometrica*, 2004. Vol 72(5), 1409-43.
- Raymond Fisman and Edward Miguel: “Corruption, Norms and Legal Enforcement: Evidence from Diplomatic Parking Tickets.” *Journal of Political Economy*, 2007. Vol 115(6), 1020-48.