Centro de Investigación y Docencia Económicas
Economics of Information
August – December 2016

Instructor: Kaniṣka Dam
Extension: 2740
E-mail: kaniska.dam@cide.edu

Class hours: Tuesday and Thursday, 11:20-12:50
Office hours: by appointment

Prerequisites: Microeconomics, Mathematics.

Course description: The course is offered to both undergraduate (semester 7) and masters (semester 3) students. It focuses on the basics of contract theory. Topics include: moral hazard with single agent, moral hazard with many agents and adverse selection with applications to theory of the firm, organizational design, regulation, development economics and financial structure. The lecture notes can be freely downloaded from my web page via the link http://kaniskadam.weebly.com/courses.html.

Grading: The course will be graded on the basis of exams (classroom or take-home), presentations and a term paper. The exact weights will be decided in due course.

Readings

Patrick Bolton and Mathias Dewatripont, *Contract Theory*, MIT Press, 2005.

Inés Macho-Stadler and David Pérez-Castrillo, *An Introduction to the Economics of Information: Incentives and Contracts*, Oxford University Press, 1997.

Andreu Mas-Colell, Michael D. Whinston and Jerry R. Green, *Microeconomic Theory*, Oxford University Press, 1995.

Debraj Ray, *Development Economics*, Princeton University Press, 1998.

Bernard Salanié, *The Economics of Contracts*, MIT Press, 1998.

Jean Tirole, *The Theory of Corporate Finance*, Princeton University Press, 2006.

Syllabus

1. Moral hazard with single agent
   (a) The moral hazard problem
   (b) Optimal contracts with two performance outcomes
   (c) A general model of incentive contracts
   (d) Informative signals
   (e) Optimality of linear contracts

(f) Contracts under risk neutrality and limited liability
(g) Grossman and Hart's approach to the principal-agent problem
(h) Optimal contracts with multiple tasks

2. Moral hazard with many agents
   (a) Moral Hazard in Teams
   (b) Relative Performance Evaluation
   (c) Tournaments

3. Adverse selection
   (a) The adverse selection problem
   (b) Monopolistic screening
   (c) A general model of adverse selection
   (d) Direct mechanism and the revelation principle
   (e) Regulation of natural monopolies: Ramsey and marginal cost pricing

4. Advanced topics
   (a) Contracts and markets
   (b) Dynamic contracts
   (c) The Nash bargaining solution
   (d) Subjective performance evaluation
   (e) Mixed models of moral hazard and adverse selection
   (f) Auctions
   (g) Incomplete contracts

Further readings

Besanko, David and George Kanatas (1993), "Credit Market Equilibrium with Bank Monitoring and Moral Hazard", *The Review of Financial Studies*, 6:213-232.

Bester, Helmut and Johannes Münster (2013), "Subjective Evaluation versus Public Information". Mimeo, Free University of Berlin.

Dam, Kaniṣka and Alejandro Robinson (2014), "Managerial Incentives in Oligopoly: The Hicks Conjecture Revisited". Mimeo, CIDE.

Ghatak, Maitreesh (1999), "Group Lending, Local Information and Peer Selection", *Journal of Development Economics*, 60:27-50.

Ghatak, Maitreesh and Priyanka Pandey (2000), "Contract Choice in Agriculture with Joint Moral Hazard in Effort and Risk", *Journal of Development Economics*, 63:303-326.

Guesnerie, Roger and Jean-Jacques Laffont (1984), "A Complete Solution to a Class of Principal-Agent Problems with an Application to the Control of a Self-Managed Firm", *Journal of Public Economics*, 25:329-369.

Hermalin, Benjamin (1992), "The Effects of Competition on Executive Behavior", *The RAND Journal of Economics*, 23:350-365.

Hermalin, Benjamin (1994), "Heterogeneity in Organizational Form: Why Otherwise Identical Firms Choose Different Incentives for Their Managers", *The RAND Journal of Economics*, 25:518-537.

Hölmstrom, Bengt and Jean Tirole (1997), "Financial Intermediation, Loanable Funds, and the Real Sector", *The Quarterly Journal of Economics*, 112:663-691.

Innes, Robert (1990), "Limited Liability and Incentive Contracting with Ex-Ante Action Choices", *Journal of Economic Theory*, 52:45-67.

Itoh, Hideshi (1991), "Incentives to Help in Multi-Agent Situations", *Econometrica*, 59:611-636.

Laffont, Jean-Jacques and Jean Tirole (1994), "Access Pricing and Competition", *European Economic Review*, 38:1673-1710.

Macho-Stadler, Ines and David Pérez-Castrillo (1993), "Moral Hazard with Several Agents: the Gains from Cooperation", *International Journal of Industrial Organization*, 11:73-100.

MacLeod, Bentley (2003), "Optimal Contracting with Subjective Evaluation", *The American Economic Review*, 93:216-240.

Mookherjee, Dilip (1984), "Optimal Incentive Schemes with Many Agents", *The Review of Economic Studies*, 51:433-446.

Mookherjee, Dilip and Debraj Ray (2002), "Contractual Structure and Wealth Accumulation", *The American Economic Review*, 92:818-849.

Myerson, Roger (1981), "Optimal Auction Design", *Mathematics of Operations Research*, 6:58-73.

Raith, Michael (2003), "Competition, Risk, and Managerial Incentives", *The American Economic Review*, 93:1425-1436.

Rogerson, William (1985), "The First-Order Approach to Principal Agent Problems", *Econometrica*, 53:1357-1368.

Rothschild, Michael and Joseph Stiglitz (1976), "Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information", *The Quarterly Journal of Economics*, 90:629-649.

Schmidt, Klaus M. (1997), "Managerial Incentives and Product Market Competition", *The Review of Economic Studies*, 64:191-213.