Contract Theory

Spring 2020: Thursday 6:40 pm-9:30 pm

Instructor: Shenzhe Jiang

Office:	Oversea Exchange Center, 417N
Email:	shenzhejiang@nsd.pku.edu.cn
Office Hours:	9:50 am-11:50 am, Mondays
Grading:	Based on a presentation of a related paper (25%) and three referee reports for assigned papers (75%).

The topics we cover are different types of basic dynamic contract. These environments involve asymmetric information, and we are mainly after two goals: one is to characterize the best allocation that are achievable (the so-called second best), the other is to find the right policies to implement the best allocation.

The main tools used in this literature are from game theory and mechanism design. Previous knowledge in dynamic programming and repeated game theory would be helpful. We will start with the recursive methods in solving dynamic contracts, then we will move on to study various extensions of the classical contracting problem, including limited commitment, hidden action and adverse selection. Lastly we focus on the application of modeling techniques we learned from contract theory on other macroeconomics issues.

Papers

1. **Recursive methods in solving dynamic contracts with limited commitment.**

   Thomas, Jonathan and Tim Worrall, Self-Enforcing Wage Contracts, Review of Economic Studies, (1988), 55, 541-554.

   Kocherlakota, Narayana, Implications of Efficient Risk Sharing without Commitment, Review of Economic Studies, (1996), 63(4), 595-609.

   Alvarez, Fernando and Urban Jermann, Efficiency, Equilibrium, and Asset Pricing with Risk of Default, Econometrica, (2000), 68(4), 775-797.

   Ligon, Ethan, Jonathan Thomas and Tim Worrall, Informal Insurance Arrangements with Limited Commitment: Theory and Evidence from Village Economies, Review of Economic Studies, (2002), 69(1), 209-44.

   Zhang, Yuzhe, Characterization of a risk sharing contract with one-sided commitment, Journal of Economic Dynamics & Control, (2013), 37, 794-809.

2. **Hidden Action and Moral Hazard.**

   Dilip Abreu, David Pearce and Ennio Stacchetti, Toward a Theory of Discounted Repeated Games with Imperfect Monitoring, Econometrica, (1990), 58(5), 1041–1063.

   Sannikov, Yuliy, Games with Imperfectly Observable Actions in Continuous Time, Econometrica, (2007), 75, 1285-1329.

   Sannikov, Yuliy, A Continuous-Time Version of the Principal-Agent Problem, Review of Economic Studies, (2008), 75, 957-984

   DeMarzo,Peter and Yuliy Sannikov, Optimal Security Design and Dynamic Capital Structure in a Continuous-Time Agency Model, (2006), Journal of Finance, 61, 2681-2724

3. **Adverse Selection and Mirrelessian Taxation.**

Atkeson, Andrew and Robert Lucas, On Efficient Distribution with Private Information, Review of Economic Studies (1992), 59(3), 427-453.

Thomas, Jonathan and Worrall, Tim, Income Fluctuation and Asymmetric Information: An Example of a Repeated Principal-Agent Problem, Journal of Economic Theory, (1990), 51(2), 367-390.

Phelan, Christopher, On the Long Run Implications of Repeated Moral Hazard, Journal of Economic Theory, (1998), 79(2), 174-91.

Mikhail Golosov, Narayana Kocherlakota and Aleh Tsyvinski, Optimal Indirect and Capital Taxation, Review of Economic Studies, (2003), 569-587.

Narayana, Kocherlakota, Zero Expected Wealth Taxes: A Mirrlees Approach to Dynamic Optimal Taxation, Econometrica, (2005), 73, 1587-1621.

Stefania Albanesi and Christopher Sleet, Dynamic Optimal Taxation with Private Information. Review of Economic Studies, (2006), 73:1, 1-30.

Farhi, Emmanuel and Ivan Werning, Capital Taxation: Quantitative Explorations of the Inverse Euler Equation, Journal of Political Economy, (2012), 120 (3): 398-445.

4. **Unemployment Insurance.**

Hopenhayn Hugo and Juan Pablo Nicolini, Optimal Unemployment Insurance, Journal of Political Economy, Vol 105(2), 412-438

Robert Shimer and Ivan Werning, Liquidity and Insurance for the Unemployed, FRB Minneapolis Staff Report 366

Robert Shimer and Ivan Werning, Reservation Wages and Unemployment Insurance, The Quarterly Journal of Economics, (2007), 122, 1145–1185.

Andrew Atkeson and Robert Lucas, Efficiency and Equality in a Simple Model of Efficiency Unemployment Insurance, Journal of Economic Theory, 1995, 66, 64-88.

5. **Miscellaneous**

Athey, Susan, Andrew Atkeson and Patrick Kehoe, The Optimal Degree of Discretion in Monetary Policy, Econometrica, (2005), September .

Spear, Stephen and Srivastava, On Repeated Moral Hazard with Discounting, Review of Economic Studies, (1987), 54 (4), 599-617.

Andrew Atkeson, International Lending with Moral Hazard and Risk of Repudiation, Econometrica, (1991), 59, 4, 1069-1089.

Manuel Amador, George-Marios Angeletos and Ivan werning, Commitment vs. Flexibility, Econometrica, (2006), March, 74, 365-396.