

MA Final Year
Delhi School of Economics
Course 802: Economic Theory of the Firm.
2024

I would mainly use journal articles for this course. Here is a tentative list of topics and some related references. This course requires a very good understanding of the **Introductory Game Theory**. Many of the topics we will cover are active research areas. The course will raise many questions and provide a few incomplete answers at best. Thus, the purpose of the course is to motivate some of the students to pursue the issues and problems in future research or to understand the core issues and trade-offs when you apply them in real life situations.

Grading

There will be 70% weight on the final examination and 30% weight on internal assessment.

1. Theory of the Firm: Introduction

- Incomplete Contracts and Theory of the Firm
- Various theories of firm and its boundaries
- Hold up problem (Example from Tadelis and Segal (2005): Lectures in Contract Theory, page 159-165)
- Double Marginalisation (Tirole, page 174-175)

References:

- Gibbons, R. (2005), Four formal(izable) theories of the firm?, *Journal of Economic Behavior and Organization*.
- Holmström, B. and Tirole, J. (1987) "The Theory of the Firm" in *Handbook of Industrial Organization*, ed. By Schmalensee, R. and Willig, R. Amsterdam, North-Holland
- Coase, R., 1937. The nature of the firm. *Economica* 4, 386–405.
- Williamson, O. E., 1981, the modern corporation: origins, evolution, attributes, *Journal of Economic Literature*, December, 1537-1568.
- Hart, O., 1995, Corporate governance: some theory and implications, *Economic Journal*, 678-689.
- Mukherjee, A. and Sinha. U. B. (2024) "Welfare reducing vertical integration in a bilateral monopoly under Nash bargaining." *Journal of Public Economic Theory* 26: e12701. <https://onlinelibrary.wiley.com/doi/full/10.1111/jpet.12701>

2. Strategic Outsourcing and vertical contracts

- Strategic outsourcing of inputs in oligopoly
- Vertical contracts with input suppliers and competition

References:

- Shy, O. and Stenbacka, R. (2003) “Strategic Outsourcing.” *Journal of Economic Behavior and Organization* 50: 203-224.
- Buehler, S. and Haucap, J. (2006). “Strategic Outsourcing Revisited.” *Journal of Economic Behavior and Organization* 61: 325-338.
- Sinha, U. B. (2016). Economies of Scale and (Non)Existence of Strategic Outsourcing in Cournot Duopoly, *Economics Bulletin*, 36(3), 1260-66.
- Arya, A., Mittendorf, B., and Sappington, D. (2008a). The make-or-buy decision in the presence of a rival: strategic outsourcing to a common supplier. *Management Science* 54, 1747–1758.
- Kabiraj, T. and Sinha, U. B. (2014). Strategic Outsourcing with Technology Transfer under Cournot Competition, *Economics Bulletin*, 34 (2), 1133-1140.
- Milliou, C., (2019), Outsourcing without cost advantage, *mimeo*.

3. Managerial Delegation and Competition

- Delegation and competition
- Delegation and Stackelberg leadership
- Delegation and signaling

References:

- Tirole, J. (1987). *The Theory of Industrial Organization*, MIT Press. pp. 34-55.
- *Fershtman C. and Judd, K. (1987). Equilibrium Incentives in Oligopoly, *American Economic Review*, 77, 927-940.
- *Basu, K. (1995). Stackelberg Equilibrium in Oligopoly: An Explanation based on Managerial Incentives, *Economics Letters*, 49, 459 – 464.
- *Kopel, M. and Pezzino, M. (2018) Strategic Delegation in Oligopoly, In: Corchon, L. C. and Marini, M. A. (Eds) *Handbook of Game Theory and Industrial Organization, volume II: Applications (Vol.2)*, Chapter 10, Edward Elgar.

4. Merger, Acquisition and Takeover

- Mergers
- Entry through acquisition – asymmetric information models
- Takeover and free rider problems
- Role of large shareholder

References:

- Shy, O. (1995). *Industrial Organization: Theory and Applications*, Cambridge, MA: MIT Press. Chapter 8, pages 169-182.
- Salant, S.W., Switzer, S., Reynolds, R.J. (1983). The losses of horizontal merger: the effects of an exogenous change in industry structure on Cournot–Nash equilibrium, *Quarterly Journal of Economics*, 98, 185–199.

- Sinha, U. B. (2001). International Joint Venture, Licensing and Buy-out under Asymmetric Information, *Journal of Development Economics*, 66(1), 127-151.
- Sinha, U. B. (2008). International Joint Venture: Buy-out and Subsidiary, *Journal of Economic Behavior and Organization*, 65(3-4), 734-756.
- Grossman, S. and O. Hart, 1980, Takeover bids, the free-rider Problem, and the theory of the corporation, *Bell Journal of Economics* 11 42-64.
- Shleifer, A. and R.W. Vishny, 1986, Large shareholders and corporate control, *Journal of Political Economy* 94(3), 461-489.
- Hirshleifer, D., and S. Titman, 1990, Share tendering strategies and the success of hostile takeover bids, *Journal of Political Economy* 98, 295-324.

5. R&D, Innovation and Market Structure

- Innovation and market structure debate
- Cooperative and non-cooperative R&D
- Spillover and R&D
- Licensing in oligopoly

References:

- Pindyck, R. S., Lecture notes on [R&D and patent licensing](http://web.mit.edu/rpindyck/www/Courses/R&D&PL_21.pdf), http://web.mit.edu/rpindyck/www/Courses/R&D&PL_21.pdf MIT Lecture note.
- Marjit, S., 1991, Incentives for cooperative and non-cooperative R and D in Duopoly, *Economics Letters*, 37, 187-191.
- Wang, X. H., 1998, “Fee versus royalty licensing in a Cournot duopoly model”, *Economics Letters*, 60, 55-62.
- Poddar, S., Sinha, U. B., 2010, “Patent Licensing from a High-Cost Firm to a Low-Cost Firm” *Economic Record*, 86, 384-395.
- Sen, D., 2002, “Monopoly profits in a Cournot Oligopoly”, *Economics Bulletin*, Vol. 4, No. 6 pp. 1–6.
- Sen, D., 2005, “Fee vs. royalty reconsidered”, *Games and Economic Behavior* 53 (2005) 141–147.
- Stamatopolous G. and Tauman, T., 2009, On the superiority of fixed fee over auction in asymmetric markets, *Games and Economic Behavior*, 67, 331-33.
- Mukherjee, A., & Sinha, U. B. (2024). Welfare reducing licensing by an outside innovator. *Economic Theory Bulletin*, 1-8.

6. Mixed Oligopoly and Privatization

- **Strategies of a Public Enterprise**
- **Optimal Privatization**
- **Privatization and Firm Efficiency**
- **Privatization and Licensing in a Mixed Oligopoly**

References:

- De Fraja, G., and Delbono, F. (1989). Alternative strategies of a public enterprise in oligopoly. *Oxford Economic Papers*, 41(1), 302-311.
- Matsumura, T. (1998). Partial privatization in mixed duopoly. *Journal of Public Economics*, 70(3), 473-483.
- Mukherjee, A., and Sinha, U. B. (2014). Can cost asymmetry be a rationale for privatisation?. *International Review of Economics & Finance*, 29, 497-503.
- Shastri, M. H., and Sinha, U. B. (2024). Privatization and Licensing Under Public Budget Constraint. *Journal of Industry, Competition and Trade*, 24(1), 9.
- Wang, L. F., Mukherjee, A., and Zeng, C. (2020). Does technology licensing matter for privatization?. *Journal of Public Economic Theory*, 22(5), 1462-1480.

7. Overlapping ownership, competition and welfare

- Ownership and competition
- Ownership and innovation
- Welfare

References:

- Fanti, Luciano. 2015. "Partial cross-ownership, cost asymmetries, and welfare." *Economics Research International*. <http://dx.doi.org/10.1155/2015/324507>
- López, Ángel L., and Xavier Vives. 2019. "Overlapping ownership, R&D spillovers, and antitrust policy." *Journal of Political Economy* 127(5): 2394-2437.
- Shelegia, Sandro, and Yossi Spiegel. 2024. "Horizontal Partial Cross Ownership and Innovation." *The Journal of Industrial Economics*. <https://doi.org/10.1111/joie.12392>.
- Stenbacka, Rune, and Geert Van Moer. 2023. "Overlapping ownership and product innovation." *International Journal of Industrial Organization* 89: 102980.