UNIVERSITY OF PENNSYLVANIA
The Wharton School

FINANCE 912 – Financial Institutions

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Course Objective:

The objective of the course is to provide an introduction to the theory of corporate finance, financial intermediation, and financial markets. The goal is to expose students to existing work and provide basic tools to do research in the area.

Course Organization:

The course will consist of lectures, in which I will review papers from the literature. Some papers will be discussed in class in great depth, while others will be mentioned briefly and left for the students for further research. A tentative list of topics and papers appears below. Topics and papers may be dropped or added, depending on progress. If time permits, the end of the course will be devoted to students' presentations of relevant papers. In addition, students will be asked to write 'referee reports' on a few selected papers (to be determined). Presentations and referee reports will be the basis for part of the course grade. The other (and main) part of the grade will be the final exam (exact weights will be determined later).

Course Materials:

Below, there is a list of articles for each topic. They are the core of the material for the course. In addition, I refer students to relevant chapters in the following books:

- Hart (1995), *Firms, Contracts, and Financial Structure*, Clarendon Press, Oxford.
- Mas-Collel, Whinston, and Green (1995), *Microeconomic Theory*, Oxford University Press.
- Tirole (2006), *The Theory of Corporate Finance*, Princeton University Press.

Course Overview:

Here is a tentative list of topics and relevant articles and book chapters:

1. Separation of Ownership and Control: Moral Hazard

Book Chapters:

- Mas-Collel, Whinston, and Green, Chapter 14.

Articles:

- Jensen, M., and W. Meckling, 1976, "Theory of the firm: managerial behavior, agency costs and ownership structure," *Journal of Financial Economics* 3, 305-360.
- Holmstrom, B., 1979, "Moral hazard and observability," *Bell Journal of Economics* 10, 74-91.
- Holmstrom, B., 1982, "Moral hazard in teams," *Bell Journal of Economics* 13, 324-340.
- Holmstrom, B., and P. Milgrom, 1991, "Multi-task principal agent analyses: linear contracts, asset ownership, job design," *Journal of Law, Economics, & Organization* 7, 24-52.

2. Contracting and the Theory of the Firm

Book Chapters:

- Hart, Chapters 1-4.

Articles:

- Grossman S., and O. Hart, 1986, "The costs and benefits of ownership: a theory of vertical and lateral integration," *Journal of Political Economy* 94, 691-719.

- Hart, O., and J. Moore, 1990, "Property rights and the nature of the firm," *Journal of Political Economy* 98, 1119-1158.

- Harris, M., and A. Raviv, 1996, "The capital budgeting process: incentives and information," *Journal of Finance* 51, 1139-1174.

- Stein, J., 1997, "Internal capital markets and the competition for corporate resources," *Journal of Finance* 52, 111-133.

- Rajan, R., and L. Zingales, 1998, “Power in a theory of the firm,” *Quarterly Journal of Economics* 113, 387-432.

- Scharfstein, D., and J. Stein, 2000, “The dark side of internal capital markets: divisional rent-seeking and inefficient investment,” *Journal of Finance* 55, 2537-2564.

<u>**3. Theories of Capital Structure**</u>

<u>Book Chapters:</u>

- Tirole, Chapters 3 and 6.

<u>Articles:</u>

- Modigliani, F., and M. Miller, 1958, “The cost of capital, corporation finance, and the theory of investment,” *American Economic Review* 48, 261-297.

- Leland, H., and D. Pyle, 1977, “Information asymmetries, financial structure, and financial intermediation,” *Journal of Finance* 32, 371-388.

- Miller, M., 1977, “Debt and taxes,” *Journal of Finance* 32, 261-275.

- Ross, S., 1977, “The determination of financial structure,” *Bell Journal of Economics* 8, 23-40.

- Bhattacharya, S., 1979, “Imperfect information, dividend policy, and ‘the bird in the hand’ fallacy,” *Bell Journal of Economics* 10, 259-270.

- Myers, S., and N. Majluf, 1984, “Corporate financing and investment decisions when firms have information that investors do not have,” *Journal of Financial Economics* 13, 187-221.

- Brander, J., and T. Lewis, 1986, “Oligopoly and financial structure: the limited liability effect,” *American Economic Review* 76, December, 956-70.

- Jensen M., 1986, “Agency costs of free cash flow, corporate finance and takeovers,” *American Economic Review* 76, 323-329.

- Stulz, R., 1990, “Managerial discretion and optimal financing policies,” *Journal of Financial Economics* 26, 3-27.

- Harris, M., and A. Raviv, 1991, “The theory of capital structure,” *Journal of Finance* 46, 297-355.

- Zwiebel, J., 1996, “Dynamic capital structure under managerial entrenchment,” *American Economic Review* 86, 1197-1215.

4. Financial Contracting and Security Design

Book Chapters:

- Hart, Chapters 5-6.
- Tirole, Chapter 10.

Articles:

- Townsend R., 1979, “Optimal contracts and competitive markets with costly state verification,” *Journal of Economic Theory* 21, 265-293.

- Gale D., and M. Hellwig, 1985, “Incentive compatible debt contracts: the one period problem,” *Review of Economic Studies* 52, 647-63.

- Bolton, P., and D. Scharfstein, 1990, “A theory of predation based on agency problems in financial contracting,” *American Economic Review* 80, 93-106.

- Aghion, P., and P. Bolton, 1992, “An incomplete contracts approach to financial contracting,” Review of Economic Studies 59, 473-494.

- Berglof, E., and E. L. von Thadden, 1994, Short-term versus long-term interests: capital structure with multiple investors, *Quarterly Journal of Economics* 109, 1055-1084.

- Dewatripont, M., and J. Tirole, 1994, “A theory of debt and equity: diversity of securities and manager-shareholder congruence,” *Quarterly Journal of Economics* 109, 1027-1054.

- Hart, O., and J. Moore, 1994, “A theory of debt based on the inalienability of human capital,” *Quarterly Journal of Economics*, 109, 841-879.

- Bolton, P., and D. Scharfstein, 1996, Optimal debt structure and the number of creditors, *Journal of Political Economy* 104, 1-25.

5. Financial Intermediation, Credit Markets, and Financial Crises

Book Chapters:

- Tirole, Chapters 12-13.

Articles:

- Stiglitz, J., and A. Weiss, 1981, “Credit rationing in markets with imperfect information,” *American Economic Review* 71, 393-410.

- Diamond, D., and P. Dybvig, 1983, “Bank runs, deposit insurance, and liquidity,” *Journal of Political Economy* 91, 401-419.

- Diamond, D., 1984, “Financial intermediation and delegated monitoring,” *Review of Economic Studies* 51, 393-414.

- Diamond, D., 1989, “Reputation acquisition in debt markets,” *Journal of Political Economy* 97, 828-62.

- Holmstrom, B., and J. Tirole, 1997, “Financial intermediation, loanable funds, and the real sector,” *Quarterly Journal of Economics* 112, 663-691.

- Allen, F., and D. Gale, 2000, “Financial contagion,” *Journal of Political Economy* 108, 1-33.

- Morris, S., and H. S. Shin, 1998, “Unique equilibrium in a model of self-fulfilling currency attacks,” *American Economic Review* 88, 587-597.

- Morris, S., and H. S. Shin, 2004, “Coordination risk and the price of debt,” *European Economic Review* 48, 133-153.

- Goldstein, I., and A. Pauzner, 2005, "Demand deposit contracts and the probability of bank runs," *Journal of Finance* 60, 1293-1328.

6. Takeovers and Corporate Control

Book Chapters:

- Tirole, Chapter 11.

Articles:

- 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, V., and R. Vishny, 1986, "Large shareholders and corporate control," *Journal of Political Economy* 94, 461-488.

- Bagnoli, M., and B. Lipman, 1988, "Successful takeovers without exclusion," *Review of Financial Studies* 1, 89-110.

- Grossman, S., and O. Hart, 1988, "One share-one vote and the market for corporate control," *Journal of Financial Economics* 20, 175-202.

- Harris, M., and A. Raviv, 1988, "Corporate governance: voting rights and majority rules," *Journal of Financial Economics* 20, 203-235.

- Burkart, M., D. Gromb, and F. Panunzi, 1997, "Large shareholders, monitoring, and the value of the firm," *Quarterly Journal of Economics* 112, 693-728.

7. Financial Markets and Price Formation

- Grossman, S., and J. Stiglitz, 1980, "On the impossibility of informationally efficient markets," *American Economic Review* 70, 393-408.

- Glosten, L., and P. Milgrom, 1985, "Bid, ask and transaction prices in a specialist market with heterogeneously informed traders," *Journal of Financial Economics* 14, 71-100.

- Kyle, A., 1985, "Continuous auctions and insider trading," *Econometrica* 53, 1315-1336.

- Admati, A., and P. Pfleiderer, 1988, "A theory of intraday patterns: volume and price variability," *Review of Financial Studies* 1, 3-40.

8. Financial Markets and Corporate Finance: Feedback Effects

Book Chapters:

- Tirole, Chapter 8.

Articles:

- Fishman, M., and K. Hagerty, 1992, "Insider trading and the efficiency of stock prices," *RAND Journal of Economics* 23, 106-122.

- Holmstrom, B., and J. Tirole, 1993, "Market liquidity and performance monitoring," *Journal of Political Economy* 101, 678-709.

- Dow, J., and G. Gorton, 1997, "Stock market efficiency and economic efficiency: is there a connection?," *Journal of Finance* 52, 1087-1129.

- Subrahmanyam, A., and S. Titman, 1999, "The going-public decision and the development of financial markets," *Journal of Finance* 54, 1045-1082.

- Fulghieri, P., and D. Lukin, 2001, "Information production, dilution costs, and optimal security design," *Journal of Financial Economics* 61, 3-42.

- Goldstein, I., and A. Guembel, 2008, "Manipulation and the allocational role of prices," *Review of Economic Studies* 75, 133-164.

- Bond, P., I. Goldstein, and E. S. Prescott, 2009, "Market-Based Corrective Actions," *Review of Financial Studies*, forthcoming.