Baruch College
The Zicklin School of Business
Department of Economics and Finance

Corporate Finance Theory
Fall 2024
Prof. J. Wang

Meeting Time: Thursdays 4:00pm-6:00pm
Classroom: B-10-215
Office Hours: Tuesday 3:45pm-4:45pm or by appointment
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Course Description

This course covers theoretical works in the major areas of corporate finance including capital structure, payout policy, mergers and corporate control, financial intermediation, and capital acquisition process. In addition to providing a framework to analyze issues in corporate finance, this course also introduces the basic analytical tools and modeling skills needed to generate theoretical research in applicable areas of financial economics.

Prerequisites

PhD level Microeconomics Theory.

Course Contents

1. Introduction to Game Theory (lecture)
   - Static game
   - Equilibrium concept
   - Dynamic game
   - Asymmetric information

2. Classical Corporate Finance Theory (lecture)
   - Perfect market
   - Taxes
   - Agency
   - Asymmetric information
   - Corporate control
   - Imperfect market
   - Security design

3. New Development in Corporate Finance Theory (lecture, student presentation, guest speaker.)

Grading Policy

Course requirements include class participation, presentation, one final exam, one critique report and one term paper. The final grade will be based on the overall performance of the students. The distribution is as follows:

Final grade = class participation (10%) + presentation (20%)
+ critique report (10%) + final exam (35%) + Term paper (25%)

Participation:
Given that this is a PhD level seminar class, it is essential that everyone participates in the class discussion actively. While there is no formal assignment, I will leave discussion questions at the end of classes.

Presentation:
Each presentation must adhere strictly to the following format (1) Statement of the problem studied; (2) Brief survey of the literature; (3) Concise, intuitive, explanation of the argument producing the major results (for theory papers) or empirical methodology; (4) Summary of main results; (5) Critical examination of the paper; (6) Sketch of major extensions to the paper with specific suggestions about possible solution techniques. Most important, each presentation must be both informative and entertaining.

Critique report:
The format of the referee report should be roughly along the following lines: (1) Statement of the problem studied; (2) brief survey of literature; (3) Concise, intuitive explanation of the argument producing the major results; (4) Summary of results; (5) Critical examination of the paper.

Term paper:
You are required to turn in a term paper before the end of the semester. This paper may be either theoretical or survey. If it is theoretical, its idea should be original. You should provide sketches to solve your model. If it is a survey, it must cover one small area of corporate finance and discuss all the most recent papers on the topic, and outline a few ideas that can be pursued in future research.

Final Exam:
The final exam will contain problems related to the topics we cover in the class.

READING LIST (tentative)

Game Theory (suggested background reading)

1. Eric Rasmusen, *Games and Information: An introduction to game theory,* Basil Blackell. (A basic book)

2. Gibbons, R., *Game Theory for Applied Economists*, Princeton University Press, Princeton, New Jersey (intermediate level).

3. Fudenberg, D., and J. Tirole, *Game Theory*, M.I.T Press, Cambridge Massachusetts. (Fairly advanced)

Classical Corporate Finance Theory

Perfect Markets

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

Taxes:

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

DeAngelo, H., and R. Masulis, 1980, Optimal capital structure under corporate and personal taxation, *Journal of Financial Economics* 8, 3-29.

Agency:
Jensen, M., and Meckling, W., 1976, Theory of the firm: Management behavior, agency costs and ownership structure, *Journal of Financial Economics* 3, 305-60.

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

Myers, S. 1977, The determinants of corporate borrowing, *Journal of Financial Economics*, 5, 147-75.

Asymmetric Information:

Ross, S. 1977. The determination of financial structure: The incentive-signaling approach, *Bell Journal of Economics* 8, 23-40.

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.

Thomas H Noe, 1988. Capital Structure and Signaling Game Eauilibria, *The Review of Financial Studies,* 1(4). p.331-355.

Corporate Control:

Harris, M., and A. Raviv, 1988, Corporate control contests and capital structure, *Journal of Financial Economics* 20, 55-86.

Stulz, R., 1988, Managerial control of voting rights: Financing policies and the market for corporate control, *Journal of Financial Economics* 20, 25-54.

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

Imperfect Markets

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

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

Hart, O., and J. Moore, 1998, Default and renegotiation: A dynamic model of debt, *Quarterly Journal of Economics* 113, 1-41.

Innes, R., 1990, Limited liability and incentive contracting with ex-ante choices, *Journal of Economic Theory* 52, 45-67.

<u>IPO</u>

Allen, F., and G. Faulhaber, 1989, Signalling by underpricing in the IPO market, *Journal of Financial Economics* 23, 303-323.

Rock, K., 1986, Why new shares are underpriced, *Journal of Financial Economics* 15, 187-212.

Welch, I., 1989, Seasoned offerings, imitation costs, and the underpricing of initial public offerings, *Journal of Finance* 44, 421-449.

<u>Mergers and the Boundaries of the Firm</u>

Gertner, R., D. Scharfstein, and J. Stein, 1994, Internal versus external capital market, *Quarterly Journal of Economics* 109, 1211-1230.

Grossman, S., and O. Hart, 1980, Takeover bids, the free-ride problem, and the theory of the corporation, *Bell Journal of Economics* 11, 42-64.

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 firms, *Journal of Political Economy* 98, 1119-1158.

Stein, J., 1988, Takeover threats and managerial myopia, *Journal of Political Economy* 96, 61-80.

<u>Corporate Governance</u>

Shleifer, A., and R. Vishny, 1986, Large shareholders and corporate control, *Journal of Political Economy* 94, 461-88.

Bolton, P., and E. won Thadden, 1998, Blocks, liquidity, and corporate control, *Journal of Finance* 53, 1-25.

<u>Security Design</u>

Allen, F. and D. Gale (1988) "Optimal Security Design," *Review of Financial Studies*, 1, 229-263.

Madan, D., and B. Soubra, 1991, Marketing of Financial Products. *Review of Financial Studies* 4, 362-384.

New Development in Corporate Finance Theory

Acharya, Viral, and S. Viswanathan, 2011, Leverage, Moral Hazard and Liquidity. *Journal of Finance,* 66(1), 99-138.

Franklin Allen, and Elena Carletti, 2008, Mark-to-Market Accounting and Liquidity Pricing. *Journal of Accounting and Economics*, 2008, 45(2-3), 358–378.

Franklin Allen, Ana Babus, and Elena Carletti, 2010. Financial Connections and Systemic Risk, *Journal of Financial Economics*, forthcoming.

Patrick Bolton, and Martin Oehmke, 2010, Credit Default Swaps and the Empty Creditor Problem, working paper, Columbia.

Edmans, A, 2011, Short-Term Termination Without Deterring Long-Term Investment: A Theory of Debt and Buyouts. *Journal of Financial Economics,* 102(1), 81-101.

Gennaioli, Nicola, Andrei Shleifer, and Robert Vishny, 2012, Neglected risks, Financial Innovation, and Financial Fragility, *Journal of Financial Economics*, 104(3), 452-468.

Gennaioli, Nicola, Andrei Shleifer, and Robert Vishny, 2014, Money Doctors. *Journal of Finance*, forthcoming.

Hackbarth, Dirk; Hennessy, Christopher A.; Leland**,** Hayne E. 2007. Can the Trade-Off Theory Explain Debt Structure? Review of Financial Studies, v. 20, iss. 5, pp. 1389-1428

Milton Harris and Artur Raviv, 2008. A Theory of Board Control and Size. *The Review of Financial Studies,* 21(4), 1797-1832.

Milton Harris and Artur Raviv, 2010. Control of Corporate Decisions: Shareholders vs. Management. *The Review of Financial Studies,* v. 23, iss. 11, pp. 4115-47

Jensen, Michael C., 2005. Agency Costs of Overvalued Equity. *Financial Management*, v. 34, iss. 1, pp. 5-19.

Leland**,** Hayne E. 2007. Financial Synergies and the Optimal Scope of the Firm: Implications for Mergers, Spinoffs, and Structured Finance. *Journal of Finance*, v. 62, iss. 2, pp. 765-807

Steven Malliaris and Hongjun Yan, 2009. Nickels versus Black Swans: Reputation, Trading Strategies and Asset Prices, working paper, Yale University.

Thomas Noe, Michael Rebello**,** 2009. To each according to her luck and power: Optimal corporate governance and compensation policy in a dynamic world, working paper, Oxford Univ.

Thomas Noe, Michael Rebello and Jun Wang, 2006. The evolution of security designs. *Journal of Finance*, 61, 2103-2135.

Thomas Noe and Jun Wang, 2004. Fooling all of the people some of the time: A theory of endogenous sequencing in confidential negotiations, *Review of Economic Studies* 71, 855-881.

Rhodes-Kropf, M., and S. Viswanathan, 2004, Market valuation and merger waves, *Journal of Finance* 59, 2685-2718.

Raghuram G. Rajan, 2012, The Corporation in Finance. *Journal of Finance* 67(4), 1173-1217.

Andrei Shleifer and Robert W. Vishny, 2010. Unstable banking. *Journal of Financial Economics.*

Thakor, Anjan, 2011, Fifty Years Since Modigliani and Miller: Is Capital Structure Really Relevant for Firm Value? Working paper, Washington University.

Papers to be presented by students (tentative)

Edmans, Alex; Goldstein, Itay; Jiang, Wei; Feedback Effects, Asymmetric Trading, and the Limits to Arbitrage. American Economic Review, December 2015, v. 105, iss. 12, pp. 3766-97.

BOND, P; ZHONG, H. 2016. Buying High and Selling Low: Stock Repurchases and Persistent Asymmetric Information. *Review of Financial Studies*. 29, 6, 1409-1452.

Aghion, Philippe, and Stein, Jeremy C., 2008. Growth versus Margins: Destabilizing Consequences of Giving the Stock Market What It Wants. *Journal of Finance*, 63(3), 1025-58.

Edmans, A, X. Gabiax, and A. Landier, 2009, A Multiplicative Model of Optimal CEO Incentives in Market Equilibrium, *Review of Financial Studies,* 22(12), 4881-4917.

Cong, L.W. and He, Z., 2019. Blockchain disruption and smart contracts. *The Review of Financial Studies*, *32*(5), pp.1754-1797.

Levit, D., 2019. Soft shareholder activism. *The Review of Financial Studies*, *32*(7), pp.2775-2808.

Malenko, A. and Malenko, N., 2019. Proxy advisory firms: The economics of selling information to voters. *The Journal of Finance*, *74*(5), pp.2441-2490.

Chang, B. and Hong, H., 2019. Selection versus talent effects on firm value. *Journal of Financial Economics*, *133*(3), pp.751-763.

Hoffmann, Florian and Vladimirov, Vladimir, Worker Runs (June 30, 2022). Available at SSRN: https://ssrn.com/abstract=4150240

Michael Sockin and Wei Xiong (2022), Decentralization Through Tokenization, *Journal of Finance*, forthcoming

Elliot Lipnowski, Doron Ravid, and Denis Shishkin (2022), **Persuasion via Weak Institutions,** JPE, forthcoming