John, Kose

NEW YORK UNIVERSITY
Stern School of Business: Graduate Division

FINC-GB.2332.01
Financial Theory II: **Part 1**
Class Room KMC 3-80

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Fall 2018
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There will be 3 extra classes, time and venue to be finalized in the first class.

Objectives: The main objective of the course is to provide students a strong background in the mainstream areas of modern corporate finance and related areas of banking at an advanced level. Providing the students an opportunity to develop modeling skills for doing research in corporate finance/banking is another important purpose of the course. Another objective is to train the students to recognize and use recurring model structures to read and understand corporate finance. Importantly, training to do good corporate finance is recognizing the interesting/important problems and embedding them in the "right" institutional structure. In addition to discussing the theoretical papers, we will refer to a large number of empirical papers as relevant.
For topics, see Reading List attached.

Pre-requisites: All participants should have taken an advanced course in microeconomics. This is a second year doctoral class.

Administrative Matters:

1. Since the objective of the course is to read and understand the major articles in corporate financial theory, participants are expected to spend adequate time preparing the assigned readings before coming to class, and working through assigned problems sets. In the first part, there will be three Problem Sets assigned.

2. The grade in the course will be based on an in-class final examination, problem sets and class participation.

Although several books containing material in corporate finance are listed below *the primary course material will be journal articles*. The books and the relevant material from them will be discussed in class. Many of the articles on the reading list will be handed out in class. Many of the others can be downloaded from JSTOR and other websites.

Recommended Texts:

For most of the material we shall rely on research papers (published or Working Papers) that will be handed out. The following books will be useful for certain material and will be referred to in class. Several chapters of the Tirole book will be recommended. For a very nice set of recent surveys of empirical work in many mainstream areas of corporate finance, I also recommend the two volumes of the Eckbo book.

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

2. Eckbo, B.E. (Ed.), Handbook of Corporate Finance: Empirical Corporate Finance, Volumes 1 and 2. In: Handbooks in Finance Series. Elsevier/North-Holland, Amsterdam, 2008.

3. Freixas, X. and J-C. Rochet, Microeconomics of Banking, The MIT Press, Second Edition 2008.

4. Bolton and Dewatripont, *Contract Theory*, MIT Press, 2005.

5. Laffont and Martimort, The Theory of Incentives: The Principal-Agent Model, Princeton University Press, 2002.

6. Copeland, Shastry and Weston, Financial Theory and Corporate Policy, 4th. Edition, Pearson Addison-Wesley, 2005.

7. Constantinides, M. Harris and R. Stulz, .*Corporate Finance: Handbook of the Economics of Finance*, Volume 1A, Handbooks in Economics 21. Elsevier/North-Holland, 2003.

8. Salanie, B., The Economics of Contracts, The MIT Press, Second Printing, 1998.

9. Mas-Colell, A., M. D. Whinston, and J. R. Green, Microeconomic Theory, Oxford University Press, 1995.

10. Hart, O., Firms, Contracts, and Financial Structure, Oxford University Press, 1995.

11. Lease, John, Kalay, Lowenstein and Sarig, Dividend Policy: Its Impact on Firm Value, Harvard Business School Press, 2000.

12. Masulis, R.W. The Debt-Equity Choice, Ballinger Publishing Company, 1988.

13. Weston, Chung and Siu, Takeovers, Restructuring and Corporate Governance, Prentice-Hall, Englewood-Cliffs, N.J., 1998. (Also see, Weston, Chung and Hoag, Mergers, Restructuring and Corporate Control, Prentice-Hall, Englewood-Cliffs, N.J., 1994).

14. Megginson, W.L., Corporate Finance Theory, Addison-Wesley, New York, 1997.

Reading List:

In Part 1 of the course, the following topics will be covered: M&M theorems on capital structure in complete/perfect capital markets, tax equilibriums, principal agent models (background), agency models in corporate finance, asymmetric information and models of signaling and reputation. We will also introduce issues of corporate governance and security design. The relevant empirical research in each area would also be discussed.

The following reading list will be organized around the topics of perfect markets, taxes (corporate/personal), agency theory and contracting, corporate governance, incomplete information games/signaling, design of securities and institutions, and models of reputation. In each area some background material, some of the relevant empirical papers and recent surveys (when available) are also listed. The articles marked with an asterisk (*) will be discussed in detail in class.

I. M&M Theorems in Complete/Perfect Capital Markets

*1. E. Fama and M. Miller, The Theory of Finance. Dryden Press, 1972, Ch.4.

*2. F. Modigliani and M. Miller, "The Cost of Capital, Corporation Finance and The Theory of Investment," American Economic Review, June 1958, 261-297.

3. M. Miller and F. Modigliani, "Dividend Policy, Growth and The valuation of Shares," Journal of Business, October 1961, 411-433.

*4. Miller, M.H., "The Modigliani Miller Propositions After Thirty Years," Journal of Economic Perspectives, Vol 2, No 4, Fall 1988, p. 99-120.

*5. Stiglitz, J.E., "Why Financial Structure Matters," Journal of Economic Perspectives, Vol 2, No 4, Fall 1988, p. 121-126.

*6. Ross, S.A., "Comment on the Modigliani-Miller Propositions," Journal of Economic Perspectives, Vol 2, No 4, Fall 1988, p. 127-133.

Background: Tirole, Chapter 2, 2.1 and 2.2.

II. Equilibria with Taxes (Corporate/Personal)

*1. F. Modigliani and M. Miller, "Corporate Income Taxes and the Cost of Capital: A Correction," American Economic Review, June 1963, 433-443.

*2. Miller, M.H.,"Debt and Taxes" Journal of Finance, May 1977, 261-275.

*3. Kim, E. Han (1989). "Optimal Capital Structure in Miller's Equilibrium," in Financial Markets and Incomplete Information: Frontiers of Modern Financial Theory, Vol. 2(ed) Bhattacharya and Constantinides, Rowman and Littlefield.

*4. DeAngelo, and R. Masulis (1980). "Optimal Capital Structure under Corporate and Personal Taxation," Journal of Financial Economics 8, 3-30.

5. Miller, M. and M. Scholes, "Dividends and Taxes," Journal of Financial Economics, December 1978, 333-364.

E1. Elton, E.J., and M.J. Gruber, "Marginal Stockholders' Tax Rates and the Clientele Effect," Review of Economics and Statistics, February 1970, 68-74.

E2. Kalay, A., "The Ex-Dividend Behavior of Stock Prices: A Re-examination of the Clientele Effect," Journal of Finance, September 1982, 1059-1070.

E3. Litzenberger, R., and K. Ramaswamy, "The Effect of Personal Taxes and Dividends on Capital Asset Prices: Theory and Empirical Evidence," Journal of Financial Economics, June 1979, 163-196.

III. Agency Theory, Incomplete Contracting, and Corporate Governance

IIIA. Overview of Principal-Agent Models (A Review).

*1. Ross, S.A., "The Economic Theory of Agency: The Principal's Problem," American Economic Review, LXII, May 1973, 134-139.

*2 Holmstrom, Bengt (1979). "Moral Hazard and Observability," Bell Journal of Economics 10, 74-91.

*3 Holmstrom, Bengt, and Paul Milgrom. 1991. "Multitask Principal-Agent Analyses: Incentive Contracts, Asset Ownership, and Job Design." Journal of Law, Economics, and Organization 7:24-52.

*4 Holmstrom, Bengt (1982), "Managerial Incentive Problems - A Dynamic Perspective", in Essays in Economics and Management in Honor of Lars Wahlbeck. Helsinki: Swedish School of Economics, 1982. (See also Review of Economic Studies, January 1999.)

*5 Rogerson, W.R., "The First-Order Approach to Principal Agent Problems," *Econometrica*, 53, November 1985, 1357-1368.

IIIB. Agency Models in Corporate Finance

*6 Jensen, Michael C. and William H. Meckling (1976). "Theory of the Firm: Managerial Behavior, Agency Cost and Ownership Structure," Journal of Financial Economics 3, 305-360.

*7 Myers, S.C., "Determinants of Corporate Borrowing," Journal of Financial Economics, November 1977, 147-175.

*8 Smith and Warner, "On Financial Contracting: An Analysis of Bond Covenants," *Journal of Financial Economics*, June 1979, 117-161.

*9 John and Kalay, "Costly Contracting and Optimal Payout Constraints," Journal of Finance, May 1982, 457-470.

*10. Green, Richard C. (1984). "Investment Incentives, Debt and Warrants," Journal of Financial Economics 13, 115-136.

*11. T. A. John and K. John, "Top Management Compensation and Capital Structure", Journal of Finance, July 1993.

12. Elazar Berkovitch and Ronen Israel, "The Design of Internal Control and Capital Structure," The Review of Financial Studies, Spring 1996, 209-240.

13. Hadiye Aslan and Praveen Kumar, "Strtegic Ownership Structure and the Cost of Debt", The Review of Financial Studies, July 2012, 2257-2300.

*14. Acharya, John and Sundaram, "On the Optimality of Resetting Executive Stock Options, Journal of Financial Economics, July 2000, 65-101.(Download from Kose John's website).

15. Park, C.," Monitoring and Structure of Debt Contracts," Journal of Finance, Oct 2000, 2157-2195.

16. John, K. and S. Kedia "Design of Corporate Governance: Role of Ownership Structure, Takeovers, Bank Debt and Large Shareholder Monitoring," NYU Working Paper, 2018.

*17. John, K. and S. Kedia "Institutions, Markets and Growth: A Study of Comparative Corporate Governance", NYU Working Paper, 2018.

*18 Hermalin, B. ""Trends in Corporate Governance," Journal of Finance, October 2005, 2351-2384.

19 Bolton, Scheinkman and Xiong, "Executive Compensation and Short-termist Behavior in Speculative Markets", *The Review of Economic Studies*, 2006.

20 N.K. Chidambaran and K. John "Managerial Compensation, Voluntary Disclosure, and Large Shareholder Monitoring," January 2013

21. Kose John, Yuanzhi Li, and Jiaren Peng, Does Corporate Governance Matter for high financial slack firms? Management Science, June 2016, 63(6), 1872-91.

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Background: Mas-Colell, Whinston and Green, Chapter 14.

Background: Freixas,X. and J-C. Rochet, Chapter 4.

Background: Laffont and Mortimort, Chapters 1 to 4.

Survey: Lambrecht and Myers, Agency Dynamics in Corporate Finance, Annual Reviews in Financial Economics, Vol 8, 2016, 53-80

Survey: R. B. Adams, B. E. Hermalin and M.S. Weisbach, "The Role of Boards in Corporate Governance: A Conceptual Framework and Survey," Journal of Economic Literature, 2010, Vol 48, No 1, 58-107.

Survey: D. Yermack, "Corporate Governance and Blockchains," Review of Finance 21, March 2017, 7-31

Survey: Harris and Raviv, "The Theory of Capital Structure," The Journal of Finance, March 1991, 297-353.

Survey: F. Allen and A. Winton, "Corporate Financial Structure, Incentives and Optimal Contracting," In *Handbooks in Operations Research and Management Science, Volume 9: Finance*, eds. R.A. Jarrow, V. Maksimovic, and W.T. Ziemba, North Holland, New York.

Survey: Kose John and Lemma W. Senbet, "Corporate Governance and Board Effectiveness," Journal of Banking and Finance, 22 (1998), 371-403.

Survey: Andrei Shleifer and Robert W. Vishny, "A Survey of Corporate Governance," Journal of Finance, June 1997, 737-783.

Survey: P. Bolton, M. Becht and A. Roell, "Corporate Governance and Control", the *Handbook of the Economics of Finance*, edited by George Constantinides, Milton Harris and René Stulz, North-Holland, 2003.

Survey: Rajesh K. Aggarwal, "Executive Compensation and Incentives," In: Eckbo, B.E. (Ed.), Handbook of Corporate Finance: Empirical Corporate Finance, Vol. 2. In: Handbooks in Finance Series. Elsevier/North-Holland, Amsterdam, 2008.

E1. Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny, "Legal Determinants of External Finance," Journal of Finance, July 1997, 1131-1150.

E2. Comment, R., and G.A. Jarrell, 1995, "Corporate Focus and Stock Returns," Journal of Financial Economics 37, 67-87.

E3. John, K., and E. Ofek, 1995, "Asset Sales and Increase in Focus," Journal of Financial Economics 37, 105-126.

E4. Lang, H.P., and R.E. Stulz, 1994, "Tobin's Q, Corporate Diversification and Firm Performance," Journal of Political Economics 102,1248-1280

E5. Berger, Philip G. and Eli Ofek, "Diversification's Effect on Firm Value," Journal of

Financial Economics, (1995) vol. 37, 39-65.

E6. Denis, David J. Diane K. Denis and Atulya Sarin, "Agency Problems, Equity Ownership, and Corporate Diversification," Journal of Finance, March 1997, 52, 135-160.

E7. Sheridan Titman and Roberto Wessels, 1988, "The Determinants of Capital Structure Choice," Journal of Finance, 43,1-19.

E8. Raghuram G. Rajan and Luigi Zingales, "What Do We Know About Capital Structure? Some Evidence From International Data," Journal of Finance, December 1995, 1421-1460.

E9. Berger and Ofek, "Causes and Effects of Corporate Refocusing," *The Review of Financial Studies*, Summer 1999, 311-346.

E10. Harvey, C. and J. Graham, "The Theory and Practice of Corporate Finance: Evidence from the Field," with John Graham, Journal of Financial Economics 2001, 60, 187-243

E11. Kose John, Lubomir Litov and Bernard Yeung "Corporate Governance and Corporate Risk Taking," Journal of Finance, 2008.

E12. K. John, A. Knyazeva and D. Knyazeva "Does geography matter? Firm location and corporate payout policy," (Joint with Anzhela Knyazeva and Diana Knyazeva), Journal of Financial Economics, 2011.

IV. Incomplete Information Games/Signalling and Efficiency Issues

*1. Spence, M., "Job Market Signaling," Quraterly Journal of Economics, August 1973,355-379.

*2. Riley, J.G., "Information Equilibrium," Econometrica 47, March 1979, 331-359.

*3. Ross, S.A., "The Determination of Financial Structure: The Incentive Signaling Approach," Bell Journal of Economics, Spring 1977, 23-40.

*4. Leland and Pyle, "Informational Asymmetries, Financial Structure and Financial Intermediation," Journal of Finance, May 1977, 371-387.

*5. Myers, Stewart C. and Nicholas S. Majluf (1984). "Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have," Journal of Financial Economics 13, 187-221.

*6. John and Williams, "Dividends, Dilution and Taxes: A Signaling Equilibrium," Journal of Finance, September 1985.

*7. Miller, M. and K. Rock, "Dividend Policy Under Asymmetric Information," Journal of Finance, September 1985.

*8. Brennan, Michael and Alan Kraus (1987). "Efficient Financing Under Asymmetric Information," Journal of Finance 42, 1225-1243.

*9. Ambarish, John and Williams, "Efficient Signaling with Dividends and Investment," Journal of Finance, June 1987, 321-343.

Background: Mas-Colell, Whinston and Green, Chapter 13.

Survey: Riley, J. G. "Silver Signals: Twenty-Five Years of Screening and Signaling," Journal of Economic Literature, Vol 39, June 2001, 432-478.

Survey: Smith, C., Jr. "Investment Banking and the Capital Acquisition Process," Journal of Financial Economics, January-February 1986, 3-30.

E1. Pyung Sig Yoon and Laura T. Starks, "Signaling Investment Opportunities, and Dividend Announcements," The Review of Financial Studies, Winter 1995, 995-1018.

E2. Masulis, R., "The Effects of Capital Structure Change on Security Prices: A Study of Exchange Offers," Journal of Financial Economics, June 1980, 139-178.

E3. Masulis, R., and A. Korwar, "Seasoned Equity Offerings: An Empirical Investigation," Journal of Financial Economics, January-February 1986, 91-118.

E4. Asquith, P., and D. Mullins, Jr., "The Impact of Initiating Dividend Payments on Shareholders' Wealth," Journal of Business, January 1983, 77-96.

E5. Vermaelen T., "Common Stock Repurchases and Market Signa ling: An Empirical Study," Journal of Financial Economics, June 1981, 139-183.

V. Reputation in Financial Markets

*1. John and Nachman, "Risky Debt, Investment Incentives and Reputation in a Sequential Equilibrium," Journal of Finance, July 1985.

*2. Diamond D., "Reputation Acquisition in Debt Markets," Journal of Political Economy, 1989, 828-862.

*3. Thomas J. Chemmanur and Paolo Fulghieri, "Investment Bank Reputation, Information Production, and Financial Intermediation," Journal of Finance, March 1994, 57-79.

VI. <u>Corporate Finance and Asset Pricing</u>

1. Thomas Philippon and Heitor Almeida, "The Risk-Adjusted Cost of Financial Distress" <u>Journal of Finance</u>, December 2007**.**

2. K. John, K.J.Martijn Cremers and Vinay Nair, "Takeovers and The Cross-Section of Returns" <u>Review of Financial Studies</u>, 2009, Vol. 22, <u>4,</u> 1409-1445<u>.</u>

3. Xiaoji Lin, "Endogenous Technological Progress and Cross-Section of Stock Returns", <u>Journal of Financial Economics</u>, February 2012, Vol. 103, 2, 411-427.

VII. <u>Design of Securities (To be covered in Part 2)</u>

1. Allen, F. and D. Gale, "Optimal Security Design," <u>Review of Financial Studies</u>, 1, 229-264, 1988.

2. Gale, D. and M. Hellwig, "Incentive Compatible Debt Contracts: The One Period Problem," <u>Review of Economic Studies</u>, 52, 647-663, 1985.

3. Diamond, D., "Financial Intermediation and Delegated Monitoring," <u>Review of Economic Studies</u>, 1984.

4. Zender, J. F., "Optimal Financial Instruments," <u>Journal of Finance</u>, 46, 1645-1663, December 1991.

5. Fluck, Z., 1997, "Optimal Financial Contracting: Debt versus Outside Equity," <u>Review of Financial Studies</u>, Summer 1998, 383-418.

6. Nachman D.C. and T. H. Noe, "Optimal Design of Securities under Asymmetric Information," <u>Review of Financial Studies</u>, Spring 1994, 1-44.

7. Repullo, R., and J. Suarez, "Monitoring, Liquidation, and Security Design," The <u>Review of Financial Studies</u>, Spring 1998, 163-188.

8. DeMarzo, P.M., and Duffie, "A Liquidity-Based Model of Security Design," <u>Econometrica</u>, 67,65-99, 1999.

9. DeMarzo, P.M., "The Pooling and Tranching of Securities: A Model of Informed Intermediation", *Review of Financial Studies*, 2005, 18, 1-35.

Survey: Harris and Raviv, "Optimal Security Design: A Survey," Northwestern University Working Paper, 1990.

VIII <u>Behavioral Corporate Finance (FYI)</u>

Jeffrey Wurgler, Malcolm Baker and Richard S. Ruback, "**B**ehavioral Corporate Finance**: A**

Survey," *in* Eckbo, B.E. (Ed.), Handbook of Corporate Finance: Empirical Corporate Finance, Volumes 1. In: Handbooks in Finance Series. Elsevier/North-Holland, Amsterdam, 2008.

IX. Corporate Takeovers (FYI)

Betton, Eckbo and Thorburn, "Corporate Takeovers", in Eckbo, B.E. (Ed.), Handbook of Corporate Finance: Empirical Corporate Finance, Volumes 1 and 2. In: Handbooks in Finance Series. Elsevier/North-Holland, Amsterdam, 2008.

X. Corporate Bankruptcy (FYI)

Hotchkiss, John, Mooradian and Thorburn, "Bankruptcy and the Resolution of Financial Distress", in Eckbo, B.E. (Ed.), Handbook of Corporate Finance: Empirical Corporate Finance, Volumes 1 and 2. In: Handbooks in Finance Series. Elsevier/North-Holland, Amsterdam, 2008.