Finance 395 (Fall 2010)
Ph.D. Seminar in Corporate Finance
Department of Finance
McCombs School of Business
University of Texas at Austin

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Course Description and Requirements

Fin 395 provides an introduction to Contract Theory (and in particular its contributions to Corporate Finance) and considers the main theoretical contributions to Corporate Finance. The class material will be divided in three parts: (i) Fundamentals of Contract Theory; (iii) The Theory of Corporate Finance and (iii) Topics on Corporate Finance.

There will be a midterm exam (40% of the grade) and a (comprehensive) final exam (60% of the grade) at the end of the semester. Several problem sets will be distributed. Problem sets constitute also a class requirement.

The lecture notes and required readings (denoted by an asterisk) are an essential part of the course. Other readings are not required, but are important for students who wish to do research in the corresponding area.

PART I: Fundamentals of Contract Theory

General references

- Bolton P. and M. Dewatripont (2005), "Contract Theory," MIT Press.
- Hart, O. (1995) "Firms, Contracts, and Financial Structure," Oxford University Press.
- Salanie, Bernard (1997), "The Economics of Contracts: A Primer." MIT Press.
- Stole, L. (2001) "Lectures on the Theory of Contracts and Organizations," Unpublished manuscript.

1. Moral Hazard and Incentive Contracts

Baker, G., R. Gibbons and K. Murphy, (1994) "Subjective Performance Measures in Optimal Incentive Contracts," Quarterly Journal of Economics 109, pp. 1125-56.

Gibbons R., and K. Murphy (1992) "Optimal Incentive Contracts in the Presence of Career Concerns: Theory and Evidence." Journal of Political Economy 100: pp. 468-505.

Grossman, S, and O. Hart (1983), "An Analysis of the Principal-Agent Problem," Econometrica, 51, pp. 7-45.

Hart, O. and B. Holmstrom (1987), "The Theory of Contracts," in Advances in Economic Theory, Fifth World Congress, edited by Truman Bewley. Cambridge: Cambridge University Press, 1987.

Hellwig, M. and K. Schmidt (2002), "Discrete-Time Approximations of the Holmstrom-Milgrom Brownian-Motion Model of Intertemporal Incentive Provision," Econometrica, 70, pp. 2225-64.

Hermalin B., and M. Katz (1991), “Moral Hazard and Verifiability,” Econometrica, 54, pp. 1735-54.

Holmstrom, B. (1979), “Moral Hazard and Observability,” Bell Journal of Economics, 10, pp. 74-91.

Holmstrom, B. (1982), “Moral Hazard in Teams,” Bell Journal of Economics, 13, pp.324-340.

Holmstrom, B. (1999) “Managerial Incentive Problems: A Dynamic Perspective,” Review of Economic Studies 66, pp. 169-82.

Holmstrom, B., and P. Milgrom (1987), “Aggregation and Linearity in the Provision of Intertemporal Incentives,” Econometrica, 55.

Holmstrom, B., and P, Milgrom (1991), “Multi-Task Principal Agent Analyses,” Journal of Law, Economic and Organization, 7.

Innes, R. (1990), “Limited Liability and Incentive Contracting with Ex Ante Action Choices”, Journal of Economic Theory 52: 45-67.

Lazear, E., and S. Rosen (1981), “Rank Order Tournaments as Optimal Labor Contracts,” Journal of Political Economy.

Laffont, J.-J and D. Martimort (2002), “The Theory of Incentives: The Principal-Agent Model,” Princeton University Press.

Malcomson, J. and F. Spinnewyn (1988), “The Multi-Period Principal-Agent Problem,” Review of Economic Studies, 55, pp. 391-407.

Mas-Colell, A., M. Whinston and J. Green (1995), Microeconomic Theory, Chapter 14.

Nalebuff, B. and J. Stiglitz (1983), “Prices and Incentives: Towards a General Theory of Compensation and Competition,” Bell Journal of Economics, 14, pp.21-43.

Prendergast, C., (1999), “The Provision of Incentives in Firms,” Journal of Economic Literature,” 37, pp. 7-63.

Salanie, Bernard (1997), “The Economics of Contracts: A Primer.” MIT Press, Ch 5 & 6.

Sappington, D. (1983), “Limited Liability Contracts Between Principal and Agent,” Journal of Economic Theory, 29, pp. 1-21.

Sappington, D. (1991), “Incentives in Principal-Agent Relationships,” Journal of Economic Perspectives, 5, pp. 45-66.

*Stole, L. (2001) “Lectures on the Theory of Contracts and Organizations,” Unpublished manuscript.

2. Mechanism Design and Self-selection Contracts (Adverse Selection)

Akerlof, G. (1970), “The Market for Lemons: Quality and the Market Mechanism,” Quarterly Journal of Economics, 84, pp. 488-500.

Baron D., and R. Myerson (1982), “Regulating a Monopolist with Unknown Costs,” Econometrica.

Bulow, J., and J. Roberts, (1989), “The Simple Economics of Optimal Auctions,” Journal of Political Economy, 97, pp. 1060-90.

*Mas-Colell, A., M. Whinston and J. Green (1995), Microeconomic Theory, Chapters13 and 23.

Moore, J. (1992), “Implementation, Contracts, and Renegotiation in Environments with Symmetric Information.” In J.J. Laffont (Ed.), Advances in Economic Theory, Sixth World Congress, Volume 1, pp. 182-282.

Myerson, R., (1981), “Optimal Auction Design.” Mathematics of Operations Research, 6, 58-73.

Myerson, R. and M. Satterthwaite, (1983), “Efficient Mechanisms for Bilateral Trading,” Journal of Economic Theory, 29: pp. 265-281.

Palfrey, T., (1992), “Implementation in Bayesian Equilibrium: The Multiple Equilibrium Problem in Mechanism Design.” In J.J. Laffont (Ed.), Advances in Economic Theory, Sixth World Congress, Volume 1, pp. 283-323.

Rothschild M., and J. Stiglitz, (1976) “Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information.” Quarterly Journal of Economics, 90 pp. 629-649.

Sappington, D., (1984), “Incentive Contracting with Asymmetric and Precontractual Knowledge.” Journal of Economic Theory 34, pp. 52-70.

*Salanie, Bernard (1997), “The Economics of Contracts: A Primer.” MIT Press. Ch. 5.

*Stole, L. (2001) “Lectures on the Theory of Contracts and Organizations,” Unpublished manuscript.

3. Incomplete Contracting and the Theory of the Firm

Aghion, P. and J. Tirole (1997), “Formal and Real Authority in Organizations,” Journal of Political Economy, 105, pp. 1-29.

Alchian, A. and H. Demsetz (1972), “Production, Information Costs and Economic Organization.” American Economic Review 62, pp. 777-95.

Baker, G., R. Gibbons and K. Murphy, (2002) “Relational Contracts and the Theory of the Firm,” Quarterly Journal of Economics 114.

Coase, R. (1937), “The Nature of the Firm,” Economica 4.

Grossman, S, and O. Hart (1986), “The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration,” Journal of Political Economy.

*Hart, O. (1995), “Firms, Contracts and Financial Structure” Chapters 2-4.

Hart, O. (1989), “An Economist’s Perspective on the Theory of the Firm,” Columbia Law Review, 89, pp. 1757-1774.

Hart, O. and J. Moore (1990), "Property Rights and the Nature of the Firm," Journal of Political Economy, 98.

Holmstrom, B. and P. Milgrom (1994), "The Firm as an Incentive System," American Economic Review.

Holmstrom, B. and J. Tirole (1989), "The Theory of the Firm," in Handbook of Industrial Organization.

Salanie, Bernard (1997), "The Economics of Contracts: A Primer." MIT Press. Ch 7.

*Tirole, J. (1999), "Incomplete Contracts: Where do we stand?" Econometrica 67, pp. 741-81.

PART II: The Theory of Corporate Finance

General references

- Grinblatt, M. & S. Titman (2002), "Financial Markets and Corporate Strategy," Irwin-McGraw-Hill 2nd Ed.
- Hart, O. (1995) "Firms, Contracts, and Financial Structure," Oxford University Press.
- Tirole, J. (2006) "The Theory of Corporate Finance" Princeton University Press.

4. Corporate Finance Basics: Fisher Separation Theorem; Modigliani-Miller Propositions; Trade-off Theory of Capital Structure

Duffie, D. (1992), "Modigliani-Miller Theorem," in Newman. P. et al. (eds), *The New Palgrave Dictionary of Money and Finance*, Vol. II, MacMillan, 715-718.

Stiglitz, J. (1974), "On the Irrelevance of Corporate Financial Policy," *American Economic Review* 66, 851-866.

Miller, M.H. (1988), "The Modigliani-Miller Propositions After Thirty Years," *Journal of Economic Perspectives* 2, 99-120.

Kraus, A., and R. Litzenberger (1973), "A State-Preference Model of Optimal Financial Leverage," *Journal of Finance* 28, 911-922.

Miller, M.H. (1977), "Debt and Taxes", *Journal of Finance* 32, 261-273.

5. Asymmetric Information and Financial Policy

Ross, S. (1977), "The Determination of Financial Structure: The Incentive-Signaling Approach," *Bell Journal of Economics* 8, 23-40.

Leland, H., and D. Pyle (1977), "Informational Asymmetries, Financial Structure, and Financial Intermediation," *Journal of Finance* 32, 371-387.

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.

Myers, S. (1984), "The Capital Structure Puzzle," *Journal of Finance* 39, 572-592.

*Daniel, K., and S. Titman (1995), "Financing Investment Under Asymmetric Information," in R. Jarrow et al. (eds.), *Handbooks in Operations Research and Management Science: Finance*, Elsevier Science, Ch. 23.

Stein, J. (1992), "Convertible Bonds as Backdoor Equity Financing," *Journal of Financial Economics* 32, 3-21.

6. An Agency Perspective on Corporate Finance

Jensen, M., and W. Meckling (1976), "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure," Journal of Financial Economics, 3, pp. 305-60.

Sappington, D. (1983), "Limited Liability Contracts Between Principal and Agent," *Journal of Economic Theory*, 29, pp. 1-21.

*Tirole, J. (2006) "The Theory of Corporate Finance" Princeton University Press.

7. Security Design Approach to Capital Structure

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.

Allen, F., and D. Gale (1988), "Optimal Security Design," *Review of Financial Studies* 1, 229-264.

Harris, M., and A. Raviv (1989), "The Design of Securities," *Journal of Financial Economics* 24, 255-287.

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* 80, 93-106.

Hart, O. (1993), "Theories of Optimal Capital Structure: A Managerial Discretion Perspective," in M. Blair (ed.), *The Deal Decade: What Takeovers and Leveraged Buyouts Mean for Corporate Governance*, The Brookings Institution, 19-53.

Hart, O. (1995), *Firms, Contracts, and Financial Structure*, Oxford University Press, Ch. 5 and 6.

Hart, O., and J. Moore (1994), "A Theory of Debt Based on the Inalienability of Human Capital," *Quarterly Journal of Economics* 109, 841-879.

Hart, O., and J. Moore (1995), "Debt and Seniority: An Analysis of the Role of Hard Claims in Constraining Management, "*American Economic Review* 85, 567-585.

Hart, O., and J. Moore (1998), "Default and Renegotiation: A Dynamic Model of Debt," *Quarterly Journal of Economics* 113, 1-41.

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.

Fluck, Z. (1998), "Optimal Financial Contracting: Debt versus Outside Equity," *Review of Financial Studies* 11, 383-418.

Myers, S. (2000), "Outside Equity," *Journal of Finance* 3, 1005-1037.

8. Financial Intermediation

*Diamond, D., and P. Dybvig (1983), "Bank Runs, Deposit Insurance, and Liquidity," *Journal of Political Economy* 91, 401-419.

Gorton, G., and G. Pennacchi (1990), "Financial Intermediaries and Liquidity Creation," *Journal of Finance* 45, 49-71.

Jacklin, C. (1987) "Demand Deposits, Trading Restrictions, and Risk Sharing," in Prescott, E., and N. Wallace (eds.), *Contractual Arrangements for Intertemporal Trade*, University of Minnesota Press.

*Diamond, D. (1984), "Financial Intermediation and Delegated Monitoring," *Review of Economic Studies* 51, 393-414.

Diamond, D. (1991a), "Monitoring and Reputation: The Choice Between Bank Loans and Directly Placed Debt," *Journal of Political Economy* 99, 689-721.

*Rajan, R. (1992), "Insiders and Outsiders: The Choice Between Relationship and Arm's Length Debt," *Journal of Finance* 47, 1367-1400.

*Holmstrom, Bengt, and Jean Tirole, 1997, Financial intermediation, loanable funds, and the real sector, Quarterly Journal of Economics 112, 663-691.

PART III: Topics on Corporate Finance

The following list considers a number of topics of potential interest for discussion. We will likely exclude some and may decide to include others.

9. The market for corporate control

Bagnoli, M., and B. Lipman (1988), "Successful Takeovers, without Exclusion," Review of Financial Studies, 1, pp. 89-110.

Carlin, W. and C. Mayer, 'How do financial systems affect economic performance', in Xavier Vives, ed., Corporate governance. Theoretical and empirical perspectives (Cambridge, UK, Cambridge University Press 2000).

Fishman, M. J. (1988), "A Theory of Preemptive Takeover Bidding," Rand Journal of Economics.

*Grossman, S., and O. Hart (1980), “Takeover Bids, the Free-Rider Problem, and the Theory of the Corporation,” Bell Journal of Economics, 11, pp. 42-64.

Grossman, S., and O. Hart (1988), “One-Share-One-Vote and the Market for Corporate Control,” Journal of Financial Economics, 20, pp. 175-202.

Harris, M. and A. Raviv (1988), “Corporate governance: Voting rights and majority rules.” Journal of Financial Economics.

Hirshleifer, D. “Mergers and Acquisitions: Strategic and Informational Issues,” *Finance*, Volume 9, North Holland Handbooks in Operations Research and Management Science, 1995, ch. 26, pp. 839-887.

Hirshleifer D. “Share Tendering Strategies and the Success of Hostile Takeover Bids,” *Journal of Political Economy*, 98(2), April (1990):295-324.

*Grossman, S., and O. Hart (1980), “Takeover Bids, the Free-Rider Problem, and the Theory of the Corporation,” Bell Journal of Economics, 11, pp. 42-64.

Grossman, S., and O. Hart (1988), “One-Share-One-Vote and the Market for Corporate Control,” Journal of Financial Economics, 20, pp. 175-202.

Shleifer, A. and R. Vishny (1997), “A Survey of Corporate Governance,” Journal of Finance, pp. 737-783.

*Zwiebel, J. (1996), “Dynamic Capital Structure under Managerial Entrenchment,” American Economic Review, 86, 1197-1215.

10. Product-market/capital-market interactions

*Brander J. and T. Lewis (1986) “Oligopoly and Financial Structure: The Limited Liability Effect.” *The American Economic Review*, Vol. 76-5, pp. 956-970.

*Bolton P. and D. Scharfstein. “A Theory of Predation Based on Agency Problems in Financial Contracting.” *The American Economic Review*, 80-1, pp. 93-106.

Fudenberg D. and J. Tirole (1986), “A ‘signal-jamming’ theory of predation” Rand Journal of Economics, 1986.

*Parsons C. and S. Titman (2007), “Capital Structure and Corporate Strategy” Foundations and Trends in Finance, Vol. 3, No. 1, 2008.

Perotti, E. and K. Spier. “Capital Structure as a Bargaining Tool: The Role of Leverage in Contract Renegotiation.” *The American Economic Review*, 83-5. pp. 1131-1141.

11. Models of Debt Structure

Berglof, E. an E-L vonThadden (1994), “Short-Term vs. Long-Term Interests: Capital Structure with Multiple Investors,” *Quarterly Journal of Economics*, 109.

Berkovitch, E. and H. Kim (1990), “Financial Contracting and Leverage Induced

Over-and Under-Investment Incentives," *Journal of Finance*, 45, pp. 765-794.

*Bolton, P. and D. Scharfstein, (1996), "Optimal Debt Structure and the Number of Creditors," Journal of Political Economy, 104, pp. 1-25.

*Diamond, D. (1989), "Reputation Acquisition in Debt Markets," *Journal of Political Economy*, 97, pp. 828-862.

Diamond, D. (1991), "Debt Maturity Structure and Liquidity Risk," *Quarterly Journal of Economics*, 106, pp. 709-737.

Diamond, D. (1993), "Seniority and Maturity of Debt Contracts," *Journal of Financial Economics*, 33, pp. 341-368.

Esty, B. and W. Megginson (2003), "Creditor Rights, Enforcement, and Debt Ownership Structure" *Journal of Financial and Quantitative Analysis* 28.

Flannery, M. "Asymmetric Information and Risky Debt Maturity Choice" *Journal of Finance* (March 1986), pp. 19-37.

Hart, O. and J. Moore (1995), "Default and Seniority: An Analysis of the Role of Hard Claims in Constraining Management," *American Economic Review*, 85.

Shleifer A. and R. Vishny (1992), "Liquidation Values and Debt Capacity: A Market Equilibrium Approach," *Journal of Finance*, 47.

Smith, C. and J. Warner (1979), "On Financial Contracting: An Analysis of Bond Covenants," *Journal of Financial Economics*, 7, pp. 117-161.

Stulz, R. and H. Johnson (1985), "An Analysis of Secured Debt," *Journal of Financial Economics*, 14, pp. 501-522.

12. Behavioral Corporate Finance

Baker M. R. Ruback and J. Wurgler (2007) "Behavioral Corporate Finance: A Survey," *Handbook of Empirical Corporate Finance.*

Heaton J.B., (2002) "Managerial Optimism and Corporate Finance," *Financial Management*, Summer 2002.

Stein, Jeremy C, (1996) "Rational Capital Budgeting in an Irrational World," *Journal of Business*, University of Chicago Press, vol. 69(4), pages 429-55.

13. Initial public offerings (IPO)

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

Benveniste L. and P. Spindt (1989) "How Investment Bankers Determine the Offer Price and Allocation of New Issues," *Journal of Financial Economics*, 24: 343-361

Jenkinson T. and A. Ljungqvist (1999) "Going Public: The Theory And Evidence On How Companies Raise Equity Finance" Oxford University Press

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

Titman, S. and B. Trueman (1986) Information quality and the valuation of new issues, *Journal of Accounting and Economics*, 8, 159-172.

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

Welch, I. (1992) Sequential sales, learning, and cascades, *Journal of Finance* 47, 695-732.

14. Financial regulation

Berheim D. and A. Rangel (2005) "Behavioral Public Economics: Welfare and Policy Analysis with Non-Standard Decision Makers" NBER working paper 11518.

Calomiris, Charles W. (2000), "U.S. Bank Deregulation in Historical Perspective," Cambridge University Press.

Kashyap, A., R. Rajan and J. Stein (2008) "Rethinking Capital Regulation," mimeo University of Chicago.

Keys, B., T. Mukherjee, A. Seru and V. Vig (2008) "Financial Regulation and Securitization: Evidence from Subprime Loans" mimeo University of Chicago.

Hirshleifer, D. (2007) "Psychological Bias as a Driver of Financial Regulation," European Financial Management Journal.

Peltzman, S. ; Michael E. Levine; Roger G. Noll, 1989, "The Economic Theory of Regulation after a Decade of Deregulation", Brookings Papers on Economic Activity. Microeconomics, Vol. 1989, pp. 1-59.

*Zingales, L. (2004) "The Costs and Benefits of Financial Market Regulation," mimeo University of Chicago.