

Financial Economics II – Corporate Finance

Fall 2013

Course Syllabus

Lectures: Stanimir Morfov and Carsten Sprenger

Case studies: Sergey Stepanov

Seminars: Ivan Larionov

Course Objectives

The main objective of the course is to develop skills for analyzing investment and financial decisions of a company. After a theoretical clarification of the objectives of a business firm, the course addresses the fundamental methods for the valuation of investment projects – net present value and real options analysis. After that, financial decisions of a company in a narrow sense are analyzed: the choice of the mix of equity and debt (capital structure), corporate hedging, and dividend policy. First, a classical approach is taken starting from the famous Modigliani-Miller theorem and extending it by the presence of taxes and costs of financial distress. Then, the same problems are analyzed considering agency problems due to asymmetric information. Applied topics such as IPOs, debt issues, mergers and acquisitions, and selected problems of corporate governance complete the course.

Prerequisites

Financial Economics I (Asset Pricing)

Methods

The following methods and forms of study are used in the course

- Lectures (one or two lectures of 80 minutes, alternating from week to week),
- Case studies (4 cases in total, each will be distributed at least one week in advance, you need to write up your solution, and it will then be discussed in a session of 80 minutes),
- Seminar (one seminar of 80 minutes once every two weeks).
- Written homework assignments. A central part of the course are homework assignments. Homework assignments have to be handed in at the due date.
- Presentation of case studies, journal articles and homework exercises in class.

- Self-study.

Main Reading

- Lecture notes provided by the lecturers.
- Berk, Jonathan and Peter DeMarzo, *Corporate Finance*, Boston Mass.: Pearson Addison Wesley, 2007, short: **BDM**
- Copeland, Thomas E., J. Fred Weston, and Kuldeep Shastri, *Financial Theory and Corporate Policy*, Boston Mass.: Pearson Addison Wesley, 2005 (4th edition), short: **CWS**
- These two sources serve as introductory reading for each topic. Additional sources, such as journal articles, other book chapters, or case studies may be given during the course. Some of them are indicated in the course outline below.

Supplementary Reading

- Tirole, Jean: *The Theory of Corporate Finance*, Princeton and Oxford: Princeton University Press, 2006.
- Grinblatt, Mark, and Sheridan Titman (2002): *Financial Markets and Corporate Strategy*, 2nd edition, Boston: McGraw-Hill

Evaluation

- *Homework*: You may collaborate with your fellow students, but need to write up your individual solution. Identical solutions will be punished. All homework problem sets are marked. If you fail to submit on time the grade for this assignment is zero. The average grade on your homework assignments accounts for 10% of the final grade.
- *Participation in class*: General attendance and activity plus the ability to answer questions or give short presentations of journal articles, other readings or homework exercises account for 10% of the final grade. If you cannot attend lectures and seminars on a regular basis, you can ask one of the lecturers for an essay assignment. This typically involves additional reading. The deadline for handing in the essay is December 20, 2013.
- *Case studies*: Cases should be solved in groups of three to five (ideally four) people. A case write-up is meant to be a group work, and each group needs to submit a single collective solution indicating all group members. Written assignments on the case studies, presentation of case solutions in class, and active participation in the case study sessions account for 15%.
- The *midterm exam* accounts for 15%.
- The rest of the grade (50%) comes from the *final exam*.

The weights given above combine into your final grade for the course. However, you need to pass both the final exam and the whole course, i.e. get more than 35 out of 100, in order to get a passing grade.

Most of the questions in the midterm and the final exam will be similar in style to the homework assignments. That is, they are mostly quantitative exercises, but your understanding of general concepts of the course will be asked in some parts of them where you should interpret or explain some result. Also, some questions will be designed will check your knowledge of the journal articles and other readings that were given throughout the course. A short list of the relevant articles will be announced before the exams.

Course Outline

The number of lectures given in parenthesis is approximate. Only lectures, no practice sessions are counted. The total number of lectures is 48 (16 weeks times 3 lectures per week).

1. The Firm and Its Objectives [6 lectures]

- The Fisher Separation Theorem: Why Should Shareholders Care about Net Present Value?
- Theoretical foundations for the objective function of the firm
- Ownership and Control: Do Managers Care about Net Present Value?

References:

- * Eichberger, Jürgen and Ian R. Harper (1997), *Financial Economics*, Oxford University Press, Sections 5.1 and 5.2.
- * CWS 1, 2A, 2B
- * Grossman, Sanford J. and Oliver D. Hart (1979), A Theory of Competitive Equilibrium in Stock Market Economies, *Econometrica*, 47(2), 293-329.
- * Grossman, Sanford J. and Joseph E. Stiglitz (1980): Stockholder Unanimity in Making Production and Financial Decisions, *The Quarterly Journal of Economics*, 94(3), 543-566.
- * Drèze, Jaques H. (1987): Decision Criteria for Business Firms, in: Jaques H. Drèze, *Essays on Economic Decisions under Uncertainty* (Ch.15), Cambridge.

2. Net present value and capital budgeting [3 lectures]

References:

- * BDM 2-9.
- * CWS 2C-2H.

3. Capital structure I: The classical approach [8 lectures]

- Modigliani-Miller Theorem
- Taxes
- Case study #1
- Costs of bankruptcy and financial distress
- Capital budgeting with debt
- Case study #2

References:

- * BDM 14-16, 18-19
- * CWS 15
- * Eichberger, Jürgen and Ian R. Harper (1997), *Financial Economics*, Oxford University Press, Section 5.3.
- * Almeida, Heitor, and Thomas Philippon (2007): The Risk-Adjusted Cost of Financial Distress, *The Journal of Finance*, 62(6), 2557-2586.
- * Frank, Murray Z., and Vidha K. Goyal (2009): Capital Structure Decisions: Which Factors Are Reliably Important?, *Financial Management*, 38(1), 1-37.
- * Korteweg, Arthur (2010): The Net Benefits to Leverage, *The Journal of Finance*, 65(6), 2137-2170.
- * Leland, Hayne E. (1994): Corporate Debt Value, Bond Covenants, and Optimal Capital Structure, *The Journal of Finance*, 49(4), 1213-1252.
- * Modigliani, F. and M. Miller (1958): "The Cost of Capital, Corporate Finance and the Theory of Investment," *American Economic Review*, 48, 261-297.
- * Modigliani, F. and M. Miller (1963): "Corporate Income Taxes and the Cost of Capital: A Correction," *American Economic Review*, 53, 433-443.
- * Miller, M. (1977): "Debt and Taxes," *Journal of Finance*, 32, 261-275.
- * Rajan, Raghuram G., and Luigi Zingales (1995): What Do We Know about Capital Structure? Some Evidence from International Data, *The Journal of Finance*, 50(5), 1421-1460.
- * Stiglitz, J. E. (1969): "A Re-examination of the Modigliani-Miller Theorem" *American Economic Review*, 59, 784-793.

4. Corporate Risk Management [3 lectures]

- Types of risk and hedging instruments
- Why do corporations hedge?

References:

- * BDM 30.
- * CWS 17D.

- * Grinblatt, Mark, and Sheridan Titman (2002): *Financial Markets and Corporate Strategy*, 2nd edition, Boston: McGraw-Hill, chapters 21 and 22.
- * DeMarzo and Duffie (1995): Corporate Incentives for Hedging and Hedge Accounting, *Review of Financial Studies* 8(3), 743-771.
- * Froot, Kenneth A., David S. Scharfstein, and Jeremy C. Stein (1993): Risk Management: Coordinating Corporate Investment and Financing Policies, *The Journal of Finance*, 48(5), 1629-1658.
- * Harrington, Scott E., Greg Niehaus, and Kenneth J. Risko (2002): Enterprise Risk Management: The Case of United Grain Growers, *Journal of Applied Corporate Finance*, 14(4), 71-81.
- * Smith, Clifford W., and Rene M. Stulz (1985): The Determinants of Firms' Hedging Policies, *The Journal of Financial and Quantitative Analysis*, 20(4), 391-405.
- * Smithson, Charles, and Betty J. Simkins (2005): Does Risk Management Add Value? A Survey of the Evidence, *Journal of Applied Corporate Finance*, 17(3), 8-17.

5. Strategy and Real Options [6 lectures]

- Setting up a decision tree
- The option to delay an investment opportunity (timing option)
- The option to expand (growth option)
- The option to abandon an investment project

References:

- * BDM 22
- * CWS 9
- * Trigeorgis, Lenos (1996): *Real Options – Managerial Flexibility and Strategy in Resource Allocation*, Cambridge, Mass.
- * Copeland, Thomas E., and Vladimir Antikarov (2005): Real Options – Meeting the Georgetown Challenge, *Journal of Applied Corporate Finance*, 17(2), 32-51.

6. Capital structure II [10 lectures]

- Taxes (continued)
- Investor conflicts
- Asymmetric information
- Interactions
- Case study #3

References:

- * CWS 12, 15
- * Akerlof, G. (1970): “The Market for ‘Lemons’: Quality Uncertainty and the Market Mechanism,” *Quarterly Journal of Economics*, 84 (3), 488-500.
- * Brander, J. and T. Lewis (1986) “Oligopoly and Financial Structure: The Limited Liability Effect,” *American Economic Review*, 76, 956–970.
- * DeAngelo, H. and R. Masulis (1980): “Optimal Capital Structure under Corporate and Personal Taxes”, *Journal of Financial Economics*, 8 (1), 3-29.
- * Frank, M. and V. Goyal (2009): “Capital Structure Decisions: Which Factors Are Reliably Important?”, *Financial Management*, 38 (1), 1-37.
- * Jensen, M. and W. Meckling (1976): “Theory of the firm: Managerial behavior, agency costs and ownership structure,” *Journal of Financial Economics*, 3, 305-360.
- * Kim, E. (1982): “Miller’s Equilibrium, Shareholder Leverage Clienteles, and Optimal Capital Structure,” *Journal of Finance*, 37 (2), 301-319.
- * Kraus, A. and R. Litzenberger (1973): “A State-Preferences Model of Optimal Financial Leverage, *Journal of Finance*, 28 (4), 911-922.
- * Leland, H. and D. Pyle (1977): “Informational Asymmetries, Financial Structure and Financial Intermediation,” *Journal of Finance*, 32, 371-387.
- * Myers, S. (1977): “Determinants of corporate borrowing,” *Journal of Financial Economics*, 5, 147-155.
- * 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.
- * Rock, K. (1986): “Why New Issues are Underpriced,” *Journal of Financial Economics*, 15, 187-212.
- * Ross, S. (1977): “The Determination of Financial Structure: The Incentive-Signalling Approach,” *Bell Journal of Economics*, 8, 23-40.

7. Capital structure III [3 lectures]

- IPOs
- Debt Issues

References:

- * BDM 23,24
- * Ritter, Jay R., and Ivo Welch, (2002): “A Review of IPO Activity, Pricing, and Allocations,” *Journal of Finance*, 57 (4), 1795-1828.

8. Dividend policy [3 lectures]

- incl. Case study #4

References:

- * BDM 17
- * CWS 16
- * Bernheim, B. and A. Wantz (1995): “A Tax-Based Test of the Dividend Signaling Hypothesis,” *American Economic Review*, 85 (3), 532-551.
- * Bhattacharya, S. (1979): “Imperfect Information, Dividend Policy, and ‘The Bird in the Hand’ Fallacy,” *Bell Journal of Economics*, 10 (1), 259-270.
- * Healy P. and K. Palepu (1988): “Earnings Information Conveyed by Dividend Initiations and Omissions,” *Journal of Financial Economics*, 21, 149-176.
- * Miller, M. and K. Rock (1985): “Dividend Policy under Asymmetric Information,” *Journal of Finance*, 40, 1031-1051.
- * Ross, S. (1977): “The Determination of Financial Structure: The Incentive-Signalling Approach,” *Bell Journal of Economics*, 8, 23-40.

9. Mergers and acquisitions [3 lectures]

References:

- * BDM 28
- * CWS 18
- * Grossman, S. and O. Hart (1980): “Takeover Bids, the Free-Rider Problem, and the Theory of the Corporation,” *Bell Journal of Economics*, 11 (1), 42-64.
- * Israel, R. (1991): “Capital Structure and the Market for Corporate Control: The Defensive Role of Debt Financing,” *Journal of Finance*, 46 (4), 1391-1409.
- * Stultz, R. (1988): “Managerial Control of Voting Rights: Financing Policies and the Market for Corporate Control,” *Journal of Financial Economics*, 20, 25-54.
- * Zwiebel, J. (1996): “Dynamic Capital Structure under Managerial Entrenchment,” *American Economic Review*, 86 (5), 1197-1215.

10. Corporate governance [5 lectures]

- Performance Measurement and Compensation
- Ownership Structure

References:

- * BDM 29
- * CWS 13
- * Aggarwal, R. and A. Samwick (1999): Executive Compensation, Strategic Competition, and Relative Performance Evaluation: Theory and Evidence, *Journal of Finance*, 54 (6), 1999-2043.
- * Celentani, M. and R. Loveira (2006): “A Simple Explanation of the Relative Performance Evaluation Puzzle,” *Review of Economic Dynamics*, 9, 525-540.

- * Gabaix, X. and A. Landier (2008): “Why Has CEO Pay Increased So Much?” *The Quarterly Journal of Economics*, 123 (1), 49-100.
- * Garvey, G. and T. Milbourn (2003): “Incentive Compensation When Executives Can Hedge the Market: Evidence of Relative Performance Evaluation in the Cross Section,” *Journal of Finance*, 58 (4), 1557-1581.
- * Hall, B. and J. Liebman (1998): “Are CEOs Really Paid Like Bureaucrats?,” *Quarterly Journal of Economics*, 113 (3), 653-691.
- * Holderness (2003): “A Survey of Blockholders and Corporate Control,” *Economic Policy Review*, Apr, 51-64.
- * Holmstrom, B. and J. Tirole (1993): “Market Liquidity and Performance Monitoring,” *Journal of Political Economy*, 101, 678–709.
- * La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and R. Vishny (2000): “Investor Protection and Corporate Governance,” *Journal of Financial Economics*, 58, 3-27.
- * Murphy, K. (1999): “Executive Compensation,” in *Handbook of Labor Economics*, Vol. 3B, ed. by O. Ashenfelter and D. Card. Amsterdam: Elsevier Science B. V.
- * Oyer, P. (2004): “Why Do Firms Use Incentives That Have No Incentive Effects,” *Journal of Finance*, 59 (4), 1619-1649.
- * Shleifer, A. and R. Vishny (1997): “A Survey of Corporate Governance,” *Journal of Finance*, 52 (2), 737-783.
- * Tirole, J. (2001): “Corporate Governance,” *Econometrica*, 69 (1), 1-35.