

MAF: Corporate Finance MN50324: Semester 2, 2011.

1. Lecturer's Details

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The course covers numerical, analytical and conceptual aspects of corporate finance. Therefore, students are expected to gain expertise in numerical and game-theoretic analysis, and deeper, conceptual understanding. Your performance on the course is assessed by exam only.

The exam consists of two sections. Section A will contain one numerical and one game-theory question. Section B will consist of two essay questions. All four questions are compulsory.

In order to provide you with practice/feedback in your exam preparation, throughout the semester, you will be required to complete homework exercises (numerical and game-theoretic). The teaching assistant will then go through the answers in your fortnightly seminars. These exercises will give an example of the *type* of questions that will come up in section A of the exam (there will also be some numerical/game-theoretic examples in the lectures: it is worth practicing these as well).

In relation to the essay questions, I am happy for you to attempt, in groups of 4 or 5 (non-assessed) essays in order for me to give you some feedback on your essay technique. Therefore, I have provided a list of

typical essay questions that have appeared in previous years' exams. For instance:

1. "The firm must understand that investing in a project is a now-or-never decision." Discuss, with particular reference to real option theory.
2. "The firm's capital structure is irrelevant." Discuss.
3. Compare and contrast the trade-off and pecking order theories of capital structure.
4. "Our firm needs to cut the dividend this year, as we have a lot of exciting new investment projects available!" Discuss the dangers inherent in doing this, and how the firm should handle such a policy.
5. A firm is deciding whether to use its excess cashflow to pay dividends or repurchase shares. Does it matter which it does? In your answer, refer to the relevant theories, and the empirical evidence.
6. "Our firm should conduct an active takeover policy, as this will greatly enhance our shareholders' wealth." Discuss this, with reference to relevant theory.
7. "When negotiating contracts with entrepreneurs, venture capitalists must be aware of the potential for entrepreneurial opportunistic behaviour." Discuss, with reference to relevant theory and evidence.

(maximum 3000 words).

3. Course Outline:

<u>Topic</u>	<u>Relevant Chapters in CWS</u>	<u>Relevant chapters in Combined HRWJJ/Shefrin book.</u>
1. Investment Appraisal, decision trees. Real options	9	4, 6, 7, 8, 22
2. Information Asymmetry/agency theory	12	
3. Capital Structure and Firm Value/Optimal Capital Structure.	15	15, 16
4. Payout Policy (Dividends/repurchases.	16	18
5. Mergers and acquisitions.	18	
6. Convertible Debt		24
7. Efficient Markets and Corporate News		13
8. Venture Capital/Private Equity	Not applicable: but see papers below	
9. Behavioural Corporate Finance		All of the Shefrin Chapters

4. Reading List

Recommended Books:

Corporate Finance/ Behavioural Corporate Finance: Special Hybrid book developed specifically for this course, combining relevant chapters from Hillier, Ross, Westerfield, Jaffe and Jordan with relevant chapters from Shefrin's book on Behavioural Corporate Finance.

Financial Theory and Corporate Policy: Copeland, Weston, Shastri: You should already have this book from the first semester. The course will use this as the starting point.

Besides these books, I thoroughly recommend the following optional reading:

- **6 Roundtable Discussions of Corporate Finance** Editor Joel Stern (Available in the library).
- **Revolution in Corporate Finance** (3rd Edition preferred, but 4th edition also available) Stern and Chew editors (available in the library).
- **Dividend Policy: its Impact on Firm Value:** Lease et al (I have a copy!).

You do not have to purchase any of these, but they will help you to research the subject beyond the lectures, and deepen your understanding of the issues in Corporate Finance.

Please note that the text-books support (and are complementary to) the lecture slides. That is, the lectures do not follow the text-book exactly. The lectures cover material beyond the text-books (such as journal articles). It is up to the student to read/research beyond the text-book and the lectures (eg read the articles, use Google, SSRN and the financial press.

Furthermore, if HRWJJ is unavailable to you, the library has a whole host of alternative corporate finance books around the 658.15 reference. They all cover similar topics.

In addition to the chapters of CWS, and HRWJJ/Shefrin identified above, I recommend the following articles.

General Corporate Finance articles:

- “The theory and practice of corporate finance: Evidence from the field” , Graham and Harvey, Journal of Financial Economics, 2001.
- “How do CFOs make Capital Budgeting and Capital Structure Decisions?” Graham and Harvey, Journal of Applied Corporate Finance, 2002.
- “The Role of the Board of Directors in the Capital Budgeting Process – Evidence from S and P 500 firms.” Grintstein, Y, and E. Tolkowsky. 2004.
- “Payout Policy in the 21st Century”, Graham, Harvey, and Michaelis., Journal of Financial Economics 2005.

1. Investment Appraisal /Decision Trees/real options.

Suggested Readings:

- Real Options Primer: A Practical Synthesis of Concepts and Valuation Approaches.” Kathleen T. Hevert, *Journal of Applied Corporate Finance*. 2001
- “Real Options and Games: Competition, alliances and other applications of valuation and strategy.” Smit, H, and L. Trigeorgis. *Review of Financial Economics* 15 (2006); 95-112.
- “A Two-stage Investment Game in Real Option Analysis.” Imai, J, and T. Watanabe. Downloadable from Google.
- “A Real Options and Game-Theoretic Approach to Corporate Investment Strategy under Competition.” Smit and Ankum. (1993). *Financial Management*.
- “Infrastructure Investment as a Real Options Game: The Case of European Airport Expansion.” Han Smit, *Financial Management* 2003.
- “Strategic Options and Games in Analysing Dynamic Technology Investments.” Smit and Trigeorgis, *Long Range Planning* (2007).
- “The Value of real options investments under abnormal uncertainty: The Case of the Korean Economic Crisis.” Lee et al, *Journal of World Business*, 2008.
- “Sunk Costs, Uncertainty and Market Exit: a real Options perspective.” O’Brien and Folt, *Industrial and Corporate Change*, 2009.
- “Are Real Options more valuable in the presence of agency conflicts?” Harreiter et al, *RMS* (2007).
- “Applications of Real Options analysis for Pharmaceutical R and D Project Valuation – Empirical Results from a Survey,” Hartmann and Hassan, *Research Policy* (2006).

2. The Financing Decision/ Optimal Capital Structure, Agency Costs, Signalling.

- Modigliani and Miller. “The Cost of Capital, Corporation Finance, and the Theory of Investment.” *American Economic Review* 1958, 261 – 297.
- Jensen and Meckling. “Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership structure.” *Journal of Financial Economics*, October 1976, 305-360.
- Jensen. “Agency Costs of Free Cashflow, Corporate Finance and Takeovers.” *American Economic Review*. May 1986.

- Myers and Majluf. “Corporate Financing and Investment Decisions when Firms Have Information that Investors do not have.” Journal of Financial Economics November 1977, 147 – 176.
- Ross. S.A. “The Determinants of Financial Structure: The Incentive Signalling Approach.” Bell Journal of Economics Spring 1977, 23 – 40.
- Harris and Raviv. “The Theory of Capital Structure.” Pg 297-355 Journal of Finance 1991.
- “An investigation of the determinants of BT’s debt levels: what does it tell us about the optimal capital structure?” Fairchild, R. International Business and Economics research Journal. Paper downloadable from Bath Working paper series.
- Graham and Harvey (1999): “The Theory and Practice of Corporate Finance: Evidence From the Field.” SSRN data base.
- Beattie et al (2004). “Diversity and determinants of corporate financing decisions: survey evidence.” University of Stirling working paper.

Other possible reading:-

- Wu, X. and Z. Wang. “Equity financing in a Myers-Majluf framework with private benefits of control.” Journal of Corporate Finance 11 (2005) 915-945.
- Thepot, J. “Jensen-Meckling 30 years after: a game theoretic view.” Downloadable from Google.
- “Corporate Financial Structure and Managerial Incentives.” Grossman and Hart 1982: in **The Economics of Information and Uncertainty**. Edited by John McCall.*
- Ang, Cole and Lin. “Agency Costs and Ownership Structure.” Journal of Finance 2000.
- Stultz. “Managerial Discretion and Optimal Financing Policies.” JFE 1990.
- Leland and Pyle. “Informational Asymmetries, financial structure, and financial intermediation.” Journal of Finance 1977.
- Harris and Raviv. “Capital Structure and the Informational Role of Debt.” Journal of Finance 1990.
- Goswami, G, et al. (1995). “Debt Financing Under Asymmetric Information.” Journal of Finance Vol 1 no 2; pg 633 – 658.
- Fairchild, R. “Conflicts between Managers and Investors over the Optimal Financial Contract.” International Journal of Business and Economics December 2003 Vol 2 No.3.

III Payout Policy.

a) Dividend Policy.

- Fairchild “Dividend Policy, Signalling and Free-cashflow: an Integrated Approach.” Forthcoming Managerial Finance.

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b) Repurchases:

- Constantinides, G.M and B. Grundy. (1990). “Optimal Investment with Stock Repurchases and Financing as Signals.” Review of Financial Studies. Vol 2 no 4; pp 445 – 465.
- Jagannathan, M. and C. Stephens. (2003) “Motives for Multiple Open-Market Repurchase Programs.” Financial Management.
- McNally, W.J. “Open Market Stock Repurchase Signalling.” SSRN.
- Bhattacharya, U. and A. Dittmar. “Costless Versus Costly Signalling: Theory and Evidence from Share Repurchases.” SSRN.
- Oded, J. (2005) “Why do firms announce Open-Market Repurchases?” Review of Financial Studies Vol 18 No 1; pp 271 – 300.
- Hausch and Seward. (1993) “Signaling with Dividends and Share Repurchases: A Choice between Deterministic and Stochastic Cash Disbursements.” Review of Financial Studies Vol 6, No 1; pp 121 – 154.
- Isagawa, N. (2000) “Open-market Stock Repurchase and Stock price Behavior when Management Values Real Investment.” Financial Review; pp 95 – 108.
- Isagawa, N. (2002) “Open-market repurchase announcements and stock price behaviour in inefficient markets.” Financial Management pp 5 – 20.
- Weston and Siu. (2003) “Changing Motives for Share Repurchases.” SSRN database.
- Chowdry and Nanda. (1994) “Repurchase Premia as a Reason for Dividends: A Dynamic Model of Corporate Payout Policies.” Review of Financial Studies, pp 321 – 350.
- Ofer and Thakor (1987). “A Theory of Stock Price Responses to Alternative Corporate Cash Disbursement Methods: Stock Repurchases and Dividends.” Journal of Finance June; pp 365 – 394.
- Pettit, J. (2001) “Is a Share Buyback Right for Your Company?” Harvard Business Review; April, Vol 79, Issue 4.
- Asquith and Mullins. (1986) “Signalling with Dividends, Stock Repurchases, and Equity Issues.” Financial Management, 27 – 44.

Fairchild’s papers:-

- “Investor Irrationality and Optimal Open-Market Share Repurchasing.” Co-authored with G. Zhang. The ICFAI Journal of Behavioral Finance Vol II No. 3. September 2005.
- “Investor Irrationality and Optimal Open-Market Share Repurchasing.” (co-authored with G. Zhang). Bath School of Management Working Paper Series December 2004.

- “Repurchase and Dividend Catering, Managerial Myopia, and Long-run Value-destruction.” (co-authored with Ganggang Zhang) Bath School of Management Working Paper Series December 2005.

Efficient Markets:

Mergers and Acquisitions:

1. The Management of Corporate Capital Structure: Theory and Evidence.” Garvey, G., and G. Hanka.

Convertible Debt.

Stein: “Convertible Debt as equity through the ‘back-door’”.
Mayers.

10. Behavioural Corporate Finance.

Behavioral Corporate Finance: Text-book chapters from Hersh Shefrin

- Mattson and Weibull. “Probabilistic Choice and Procedurally bounded rationality.” Games and economic Behavior 2002.*
- Joyce. “Options and the behavioral aspects of the ability to revise.” 2002 Mimeo.
- Harbaugh. “Skill Reputation, prospect theory, and regret theory.” 2002. SSRN. *
- Stein. “Rational capital budgeting in an irrational world.” Journal of Business 1996.*
- Statman and Caldwell. “Applying behavioural finance to capital budgeting: project terminations.” Financial Management 1987.*
- Heaton. “Managerial Optimism and Corporate Finance.” Financial Management 2002.*
- Gervais et al. “Overconfidence, Investment Policy, and Executive stock Options.” 2003 SSRN.
- Shefrin. “Behavioral Corporate Finance.” SSRN. *
- Fairchild’s papers:-
 - “Behavioral Finance in a Principal-agent Model of Capital Budgeting.” The ICFAI Journal of Behavioral Finance Vol II No. 1. March 2005.
 - “Investor Irrationality and Optimal Open-Market Share Repurchasing.” Co-authored with G. Zhang. The ICFAI Journal of Behavioral Finance Vol II No. 3. September 2005.

- “The Effect of Managerial Overconfidence, Asymmetric Information, and Moral Hazard on Capital Structure Decisions.” The ICFAI Journal of Behavioral Finance vol II, no 4 . December 2005.
- “The Effect of Managerial Overconfidence, Asymmetric Information, and Moral Hazard on Capital Structure Decisions.” Posted to SSRN database 29/04/05.
- “Managerial Overconfidence, Moral Hazard, and Financing and Investment Decisions.” Bath School of Management Working Paper Series November 2005.

b) Venture Capitalism:

Admati, A. and P. Pfleiderer. (1994). “Robust Financial Contracting and the Role of Venture Capitalists.” *Journal of Finance* 49, 371 – 395.

Amit, Glosten and Muller,. (1990). “Entrepreneurial ability, venture investments, and risk sharing.” *Journal of Management Science* 36, 1232 –1243.

Baker and Gompers (1999). “Executive Ownership and Control in Newly Public Firms: The Role of Venture Capitalists.” SSRN database.

Bascha, A. (2000). “Why Do Venture Capitalists hold different Types of Equity Securities?” SSRN database.

Cable, D.M, and S. Shane (1997). “A Prisoner’s Dilemma Approach to Entrepreneur-Venture capitalist relationships.” *Academy of Management Review*, Vol 22, no 1, 142 – 176.

Casamatta, C. (2003). “Financing and Advising: Optimal Financial Contracts with Venture Capitalists.” *Journal of Finance* vol 58, no 5, 2059 – 2085.

Elitzur, R., and A. Gaviious. (2003). “Contracting, Signalling, and Moral Hazard: a Model of Entrepreneurs, ‘angels’, and Venture Capitalists.” *Journal of Business Venturing* 18, 709 – 725.

Kaplan, S. and P. Stromberg. (2000). “Financial Contracting Meets the Real World: An Empirical Analysis of Venture Capital Contracts.” SSRN database.

Klausner and Litvak. (2001). “What Economists have taught us about Venture Capital Contracting.” SSRN Database.

Tykvova, T. “What Economists tell us about Venture Capital.” SSRN/Google.

Repullo and Suarez (2004). “Venture Capital Finance: A Security Design Approach.” *Review of Finance* 8: 75 – 108.

Sahlman (1990). "The Structure and Governance of Venture Capital Organizations." *Journal of Financial Economics* 27, 473 – 524.

Shepherd and Zacharakis. (2001). The Venture Capitalist-Entrepreneur Relationship: Control, Trust, and Confidence in Co-operative Behaviour." *Venture Capital* 129 – 149.

Ayayi, A. "Optimal Capital Structure and the interactions between New Venture Investment and Venture Capital Finance." SSRN.

Houben, E. (2002) "Venture Capital, Double-sided Adverse Selection, and Double-sided Moral Hazard." SSRN.

Hsu, D.H. (2004). "What Do Entrepreneurs pay for Venture Capital Affiliation?" *Journal of Finance*, August; pp 1805 – 1844.

Florin, J. (2005) "Is venture capital worth it? Effects on firm performance and founder returns." *Journal of Business Venturing*, pp 113 – 135.

Fairchild's papers:-

- "Financial Contracting between Managers and Venture Capitalists – The role of Value-added Services, Reputation seeking and Bargaining Power." *Journal of Financial Research* Winter 2004 volume XXVI Number 4.
- "The Effects of Self-interest and Fairness on Entrepreneur/Venture Capitalist Financial Contracting and Performance." Posted to SSRN Database January 16th 2006. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=875833

Private Equity:

TBA

You do not have to read all of these articles! Highly recommended articles are very important! Use your discretion regarding the other articles!

Seminars: Class Exercises.

In addition to the lectures, there will be weekly seminars (run by teaching assistant Xinyi Huang). These will commence in week 19 (week beginning 8th February).

In the exam, there will be an essay section, and a numerical/analytical section. The analytical section consists of a numerical question, and a game-theoretic question.

Throughout the course, you will receive exercises to do in your own time (these will provide good practice for the *sort of* questions that *may* arise in the numerical/game theoretic section of the Summer Exam). In the seminars, Xinyi will work through the answers.

Each of you will attend fortnightly seminars. Your exercise schedule is as follows:

Week	Class Exercise
19 (W/C 8/2/09) 20	Decision Tree exercise/real options game theoretic exercise.
21/22	Capital Structure Exercise 1 and 2
23/24	Debt/dividend Signalling games.
25/26	M and A exercise.
30/31	Venture Capital Game/ Behavioural Corporate Finance: debt signalling game with overconfidence.