

Hong Kong University of Science & Technology

School of Business and Management

FINA 512 – CORPORATE FINANCE
FALL 2002
SATURDAY SESSIONS

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#1: "Finance. Eat your spinach. Finance is at the core of so many successful companies that no CEO aspirant can afford to avoid schooling in it. . . This will help you understand, among other things, how your company raises and allocates capital. It will also make clear why that new product your team has designed might not be launched, despite its sensational showing in test markets: The numbers indicate that most likely the returns on the item will never clear the hurdle rate that will cover the cost of capital it requires and deliver a profit as well."

*Really important things you need to know (to advance your career today),
Fortune magazine, January 15, 1996, p. 36*

COURSE OUTLINE

This core course provides a framework for analyzing the major types of investment and financing decisions made by firms. We start with corporate investment decisions and then move to an understanding of how firms decide between alternative sources of financing their investments. We also examine the concept of risk and return and learn how to estimate the cost of debt, the cost of equity, and the weighted average cost of capital (WACC). A good knowledge of the topics in this course is important for anyone thinking of a career in investment banking, consulting, and corporate management.

PREREQUISITES

A strong background in financial accounting, microeconomics, and business statistics is essential. In addition, you should have basic Excel spreadsheet skills.

READINGS

Required Text

- The text for the course is: *Principles of Corporate Finance* by Richard Brealey and Stewart C. Myers, McGraw-Hill, 7th Edition (BM).
- *Case studies and readings*

Supplementary Readings

- Corporate Finance by Stephen A. Ross, Randolph W. Westerfield, and Jeffrey A. Jaffee, Richard D. Irwin Inc., 6th edition, 2002 (RWJ). This is another excellent text giving a similar treatment to the Brealey and Myers textbook.
- *Corporate Finance: A Valuation Approach* by Simon Benninga and Oded Sarig (McGraw Hill, 1997). This is a relatively new textbook that looks at applied corporate finance issues with particular emphasis on financial modeling techniques. The text provides a good theoretical understanding behind corporate valuation issues.
- *Capital Ideas: The Improbable Origins of Modern Wall Street*, by Peter Bernstein.
- *Asian Wall Street Journal*

OFFICE HOURS

Office hours are by appointment. Questions can be asked via e-mail at any time.

GRADING

Your grade in this course is based on class participation, problem sets, case analyses, and a final exam.

Class participation	5%
Problem sets	20%
Case analyses	30%
Final exam	45%

Problem sets: There are four problem sets. Working on these problems will help you in understanding the material of this course without “grade pressure”. The solutions are due on the dates indicated below and late submissions are not accepted. If I can see you are making a good-faith effort to work the problems, you will receive full credit. Each homework solution turned in counts five-percentage point for a total of 20 percentage points towards your final grade. Your submissions will not be returned to you so please keep extra copies for your reference.

Case write-ups: Case write-ups are to be turned in at the beginning of class on due dates. Late submissions are not graded. Cases can be done in groups of up to 6 students. Please hand in one copy of the write-up with names of all group members. At the end of the course, you will evaluate each of your group members on the contribution they made to the group assignments. A sample peer-review form is enclosed. Your group members’ assessment of your contribution will enter into your class participation grade.

Case write-ups need not be long (3-4 pages would be sufficient to answer the suggested questions for each case. Tables and figures can be appended to the end). The order in which you answer the case questions is not important. Your logical order may be different from the sequence in which these questions appear on the syllabus. The exhibits and tables should be numbered and referenced in the text when needed to support your arguments. When you are referring to a table, you should explicitly indicate why you want me to look at that table, what numbers you consider important, and what conclusion you draw from them. Tables and exhibits that are not referenced in the text of your report should not be included.

Final examination: The final exam is closed book but you can bring a 5×7 card of hand-written notes into the exams. Financial calculators are not needed for the course, but a regular calculator will be required. You cannot take the final exam early and there will be NO MAKEUP exam for those who miss it. If you miss the exam, you will have to take it in the following year.

WEEKLY HANDOUTS

There will be a weekly handout at the end of each session giving administrative details.

TEACHING ASSISTANT

Teaching assistant for this course is Ms. Stella Lien. Stella's e-mail is stellacc@ust.hk and her telephone number is 2358-7674. Stella will also answer questions via e-mail and meet with you by appointment.

AUDITING, CLASS PARTICIPATION, ATTENDANCE, SEATING

Auditing: Students may not audit this course. If you want to take this course, you would have to be registered in the course with the expectation of receiving a letter grade. Once registered, you cannot convert this into an audited course or expect to get an incomplete. Your only options are to drop the course during add/drop period or withdraw if permissible under 'Regulations Governing Postgraduate Studies'.

Class participation and attendance: Class participation is important. An important pre-condition to getting points on class participation is that you come to class. You cannot participate if you are frequently absent. Frequent absences would negatively affect your participation grade. The class starts at the scheduled time precisely. Please make sure that you are in your assigned seat a few minutes before the session starts.

Seating: To ensure that your class participation grades are accurately recorded, this course has fixed seat assignments. By the second week of classes, you pick a seat where you would like to sit for the rest of the term. Once chosen, the position is fixed and no changes are allowed later. There would be name cards in front of your seat at the beginning of each class session. Please do not take the cards away; it is my responsibility to remove them from the holders at the end of each session.

Academic Integrity: It is expected that you will support and maintain a high standard of academic integrity. Cheating on exams, problem sets, cases and other academic misconduct will result in a failing grade and additional sanctions. A gross violation of Academic Regulations would be using solutions to the cases and home-works from previous years, be it someone's class notes or case solutions, whether verbal or written (see section 12.1 Academic Dishonesty of the Academic Calendar 2000-01). Please ensure that telephones and pagers are switched off during class period.

E-MAIL

I will occasionally send email messages with administrative information to the class list. If you are registered for this course and have an e-mail address with the ARR, your name should be on the list. The email will go to your HKUST e-mail account.

COURSE SCHEDULE, READINGS AND DUE DATES

1.	November 2, 2002	<ul style="list-style-type: none"> i. Syllabus. Introduction and Vocabulary. ii. Market efficiency iii. Fundamentals of valuation <ul style="list-style-type: none"> a. Theory of value: present value. b. Perpetuities and annuities
		<p><i>Readings:</i></p> <p>BM Chapters 1, 2, 3, 13.</p>
2.	November 9, 2002	Valuation of bonds and stocks
	PROBLEM SET 1 DUE	<p><i>Readings:</i></p> <p>BM: 3.5, 4</p>
3.	November 16, 2002	Net Present Value rule and creation of value
	PROBLEM SET 2 DUE	<p><i>Readings:</i></p> <p>BM: 5, 6 and 10</p> <p>Ross, SA, "Uses, abuses, and ..."</p> <p>Copeland, "Cutting costs without drawing blood..."</p>
4.	November 23, 2002	Investment decisions and creation of value Project evaluation
	CASE DUE	<p><i>Readings:</i></p>

		<i>Case: The Super Project, Harvard Business School case # 112-034.</i>
5.	November 30, 2002 PROBLEM SET 3 DUE	Financial leverage and firm value Capital structure: Limits to the use of debt <i>Readings:</i> BM: 14, 17, 18 Rajan and Zingales: “What do we know about...” Myers, “The Capital Structure Puzzle”
6.	December 7, 2002 PROBLEM SET 4 DUE	Capital structure and the cost of capital Estimating the cost of equity and cost of debt (with a brief overview of CAPM and its applications) <i>Readings:</i> BM: 8.2, 9, 19 Damodaran, “Estimating risk-free rates” Damodaran, “Estimating equity risk premiums” Rosenberg and Rudd, “The corporate use of beta”
7.	December 14, 2002 CASE DUE	Divisional cost of capital Review of the course <i>Readings:</i> <i>Case: Marriott Corporation: The cost of capital, Harvard Business School, 9-289-047.</i>
8.	December 21, 2002	Final Exam

When you complete this course, you should be able to:

1. Estimate an investment’s relevant costs and benefits.
2. Use net present value techniques to analyze investment opportunities.
3. Organize the capital budgeting process to make better investment decisions.
4. Learn how capital structure and financing decisions affect the operating strategy of firms
5. Analyze different ways of designing financial claims to achieve optimal outcomes
6. Understand how financial strategy can help your corporation’s overall strategy
7. Estimate a company’s weighted average cost of capital and understand its role in investment decision making
8. Learn how to explain the cost of capital

ARTICLES

- Copeland, T., 2000. Cutting costs without drawing blood. *Harvard Business Review* (September-October), 3-7.
- Damodaran, A., Estimating risk-free rates, working paper 2000 Stern School of Business New York, NY
- Damodaran, A., Estimating equity risk premiums, working paper 2000 Stern School of Business, New York, NY
- Myers, Stewart C., 1984. The capital structure puzzle. *Journal of Finance* XXXIX 3, July, 575-592.
- Rajan, R., Zingales L., 1995. What do We Know about Capital Structure? Some Evidence from International Data. *Journal of Finance* 50, 1421-1460.
- Rosenberg, B., Rudd, A., 1998. The corporate use of beta. In Joel M. Stern and Donald H. Chew, Jr., (eds.) *The Revolution in Corporate Finance*, 3rd Edition (Malden, MA: Blackwell Publishers), 58-68.
- Ross, S.A., 1995. Use, abuses and alternatives to the NPV rule. *Financial Management* (Spring).

CASE PROBLEMS

Case 1: Super Project

The managers at the Jell-O division of General Foods plan to introduce a new powdered dessert product called Super. To determine whether Super should be accepted, it is necessary to determine whether Super meets the return criteria that General Foods has established for investment spending. There are several major concerns about what exactly are the incremental cash flows relevant for valuation.

1. How should test market expenses be treated? Would you include them as a cost? Explain.
2. Would you include some or all of the building and agglomerator capacity as a cost? Explain.
3. Would you allocate increase in overhead cost to the project? Explain.
4. Would projected erosion in Jell-O sales be a concern? Explain.
5. Using exhibits 5 and 6, project the free cash flows for the “Super” project over the next 10 years.
6. Estimate the terminal value for Super.
7. Estimate the NPV of Super Project assuming a cost of capital of 12 percent. Would you accept or reject the project? Provide reasons and calculations in support of your conclusion.

Case 2: Marriott Corporation

1. Are the four component of Marriott's financial strategy consistent with its growth objectives?
2. What are the costs of capital for the lodging, restaurant, and contract services divisions of Marriott?
 - (a) What risk-free rate and risk premium did you use to calculate the cost of equity? Why did you choose these numbers?
 - (b) Did you use arithmetic or geometric averages to measure rates of returns? Why?
3. What is the overall weighted average cost of capital for Marriott Corporation?
4. If Marriott used a single corporate hurdle rate for evaluating investment opportunities in each of its lines of business, what would happen to the company value over time?

Peer Review Form for Group Assignments

NAME OF GROUP MEMBER BEING EVALUATED:

1	2	3	4	5	Works well with group and treats all group members as colleagues
1	2	3	4	5	Completes individual task requirements to achieve group goals
1	2	3	4	5	Attends all group meetings or provides advance notice when absent
1	2	3	4	5	Is open to feedback, listens to and considers others' point of view
1	2	3	4	5	Offers ideas and alternative approaches on how to achieve group goals. Encourages innovative thinking
1	2	3	4	5	Works to enable group to move ahead efficiently; goes beyond the requirements of the tasks; looks for opportunities to improve

1. Would you like to work with this person again?

2. Evaluate this group member overall on a scale of 1 to 10 (10 being the highest):