THE UNIVERSITY OF NEW SOUTH WALES

SCHOOL OF BANKING AND FINANCE

FIN5514 CAPITAL BUDGETING AND FINANCIAL DECISIONS
Course Outline, Session 2, 2003

Introduction

Capital budgeting and financial decisions is primarily concerned with the major financial decisions faced by the firm. These decisions can be broadly classified as the investment decision, the financing decision, the dividend decision and the restructuring decision. The course will examine the main theories and empirical evidence surrounding these decisions. This body of knowledge will then be used to help solve typical ‘real’ problems faced by senior finance managers.

Key Learning Outcomes

On completion of the course, you will:

- Be able to explain why the separation of the ownership and the control of most major corporations can cause agency problems and describe how a judicious use of different financing vehicles (e.g., equity, debt, convertibles, dividends, etc.) can reduce such agency costs;
- Be able to apply several capital budgeting techniques using MS Excel, appreciating the strengths and weaknesses of the different techniques;
- Have an understanding of how to incorporate risk and uncertainty into capital budgeting decisions and how capital budgeting is applied in practice;
- Understand the link between capital budgeting decisions and the impact on firm performance. You will also appreciate the key issues surrounding the performance measurement debate;
- Have an understanding of the restructuring choices faced by managers and how these choices can help resolve agency problems within the firm;
- Be able to describe how the arbitrage-based arguments of Modigliani and Miller establish the irrelevance propositions and to explain why their framework can contribute to our understanding of financing decisions;
• Be able to explain why managers face an adverse selection problem to convince investors to give the financing that managers need to implement investment decisions and to describe how costly signalling mechanisms can assist the managers to make informed corporate finance decisions;

• Be able to explain the key issues surrounding the formulation of a company’s dividend policy;

• Be able to critically evaluate the core empirical evidence related to each of the key financial decisions.

Prerequisites

The prerequisites for this course are: Business Economics (ECON5103), Statistics for Business (ECON5203) and Security Valuation and Portfolio Selection (FINS5513, allowed as a co-requisite). It is the student’s responsibility to ensure that the prerequisites have been met prior to the commencement of the course.

Web Page

This subject has a web site (http://banking.web.unsw.edu.au). Lecture overheads, tutorial questions and solutions will be downloadable from this site. Class announcements will also be posted to this site. To access the site, you need a valid Unipass number if you are using campus wide PCs. If you wish to access the site from your home or work PC you will need to connect to the University Dial-Up System (UDUS). Details about Unipass and UDUS may be obtained from www.disconnect.unsw.edu.au/old-index.html.

Lectures

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Lecturers

Dr Ronan Powell (weeks 1-9)  
Office: Quad 3022  
Email: r.powell@unsw.edu.au  
Tel: 9385-4925

Dr Sian Owen (weeks 10-14)  
Office: Quad 3057  
Email: sian.owen@unsw.edu.au  
Tel: 9385-4412

Course Format

A combination of formal lectures, tutorials (problem solving classes) and computer lab sessions will be used. The computer lab sessions give you an opportunity to experience practical applications of material covered in the lectures.

• Tutorials/problem-solving classes: Students must prepare answers in advance to the exercises set for each week. A tutorial / problem-solving class will be held
during the last hour of each lecture. Solutions will also be available on the subject web page.

- Labs: Two computer lab sessions will be held in weeks 4 and 6. Details will be posted on the web in week 2.

**Assessment**

The course will be assessed through a combination of class tests a formal written exam and a project.

- Class tests: A class test will be held during the normal lecture times in week 7 and week 14. The tests will be of multiple-choice format in which students have to answer 30-questions in 1 hour. The first (second) test will cover lecture material (Brealey and Myers only) from weeks 1 to 6 (7-12). The tests carry a weight of 15% each (total 30%)
- A formal end of semester written exam will be held during the University’s exam period. Details will be posted on the web later in the semester. The final exam has a weight of 40%.
- Project: The project will be in the form of a mini-case study. You will be required to provide a solution to a capital budgeting problem using Microsoft Excel and to write-up the results in the form of a business report. You will carry out this task in groups. Details will be posted on the web in week 2. The project has a weight of 30%.
- The weighted average mark across all assessments will be used to determine pass or failure.

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**Textbooks / Reference Material**

**Required purchase:**


_Students may also want to consult the following texts, which are available from the library:_


Damodaran, Levy and Sarnat and Ross, Westerfield and Jaffe all cover the same material as Brealey and Myers, albeit in a different style. Bierman and Smidt provide quite an extensive coverage of capital budgeting with a good discussion of capital budgeting applications and the difficult aspect of dealing with the uncertainty problem. Copeland, Koller and Murrin is primarily aimed at financial managers and provides an excellent coverage of the more practical aspects of investment decision making and how such decisions impact on firm value. Copeland and Weston, although a little dated, provides a much more rigorous analysis of most of the subject matter. The academic papers listed below are available in full-text format (pdf files) from the library. Simply go to the library home page and click on the hyperlink to ‘MyCourse@UNSW’, which appears under ‘Catalogues’. As a postgraduate course, you are expected to read broadly on each subject area. The list of references provided under each subject heading should be regarded as the minimum reading necessary to achieve a pass in this course.

**Web site resources:**

Brealey and Myers web site:

Corporate Finance online: Covering 27 different topics, you can complete challenging exercises and discussion questions that draw on recent articles, company reports, government data and other Web-based resources.

Finance around the world: Provides an interactive map that allows you to access finance and business news and analysis from your favourite regions of interest around the world.

The Economist:
Lecture Program

Week 1-2
**Introduction to the course:** an introduction to agency theory and models, shareholder wealth maximization, objectives of the firm, value creation, empirical evidence.

BM Chapter 1
CW 2 (page, 20), 14 (page 509-512)

Weeks 3-5 (week 4 class will be held in the computer lab)
**The investment decision I (the certainty case):** defining cash flows, financial mathematics for capital budgeting, the time value of money, the link between stock prices and cash flows, traditional techniques for capital budgeting, discounted capital budgeting techniques, net present value versus internal rate of return, mutually exclusive projects, inflation and tax in capital budgeting, capital rationing

BM Chapters 2, 3, 5, 6

Weeks 6-7 (week 6 class will be held in the computer lab)
**The investment decision II (the uncertainty case):** defining risk and uncertainty, sensitivity analysis, Monte Carlo simulation, decision trees, practical problems in capital budgeting, multi-period capital budgeting and risk-adjusted discount rates, capital budgeting techniques in practice, real options and capital budgeting, strategic value analysis.

BM Chapters 7*, 8*, 9, 10, 11,

(Class test 1 will be held during the week 7 lecture).

* (Material in BM chapters 7 and 8 will not be covered in the lecture and will be assumed knowledge. You will have already covered this material in FINS5513)

Week 8
**Performance measurement:** evaluating firm performance post capital budgeting, methodological issues in measuring performance, accounting versus cash flow measures
of performance, residual income and economic value added, relationship between firm performance and stock prices.

BM Chapter 12

Week 9
The restructuring decision 1: the venture capital market and the decision to go public (IPOs)

BM Chapter 15

Week 10
The restructuring decision 2: mergers and acquisitions, motives for takeovers, measuring the gains to takeovers, takeover battles and tactics, leveraged and management buyouts, divestitures, international corporate governance issues.

BM Chapters 33, 34

Week 11
The dividend decision: dividend policy with and without (irrelevancy theory) taxes, optimal dividend policy, clientele effects, signalling hypothesis, empirical evidence on dividend policy and firm value.

BM Chapter 16

Weeks 12-13
The financing decision: traditional theory of capital structure, Modigliani and Miller propositions, determinants of capital structure including agency, asymmetric information (signalling hypothesis) and corporate control considerations, impact of capital structure on capital budgeting decisions, empirical evidence on capital structure.

BM Chapter 17, 18, 19
Week 14 (Class test 2 followed by revision class)
**Failure to Sit an Examination**

Students should notify employers of the requirement to attend examinations. If you miss any of the class tests (for any reason – employment, sickness, timetable clashes etc.), then in exceptional circumstances (for example, hospitalisations), you may be permitted to sit the missed section at a future date when the School offers supplementary examinations. If you have been granted a supplementary exam, this information will be posted on the class web site on the last day of the examination period. You will not be advised by any other means. Failure to undertake an exam at its scheduled time does not automatically lead to reassessment (see Supplementary Exam information at the end of this handout). **It is emphasized that in the event that a supplementary exam is granted, the highest grade awarded will be a **PASS** for that component of the assessment.**

**Use of Electronic Calculators During Examinations**

Students may use either a non-programmable electronic/scientific or non-programmable financial calculator (such as Texas Instruments BAII+ for examination purposes). **Note that hand-held computers, Apple Newton, personal information managers or devices with a full alphanumeric keypad or with character recognition are strictly prohibited.** Failure to follow this requirement and use an unprescribed aid during an examination is a serious offence and will be regarded as a most grave form of academic misconduct. If you are unsure about the calculator read the operating manual provided with your calculator. Students are responsible for ensuring their calculator meets with these requirements.

**INFORMATION CONCERNING STUDENT CONDUCT AND RESPONSIBILITIES**

Students should be aware of general University, Faculty and School rules that are discussed in detail in the UNSW Calendar. However, I draw your attention to the following issues that are particularly relevant to this course.

**Student Identification Required for All Examinations**

Student ID should be visible at all times during the examination. Students without photographic ID may not be allowed to sit the examination.

It is the student’s responsibility to ensure that they are aware of the University rules concerning their degree and meet the assessment criteria in this subject. Failure to misread this document, the Faculty handbook/University Calendar or examination timetable, or to receive announcements in class or sit examinations does not mean that further assessment is automatically granted.
Special Consideration

Attention is drawn to the following extract from the UNSW Calendar ‘Procedures’:

‘Students who believe that their performance in a subject, either during session or in an examination, has been adversely affected by sickness or any other reason should inform the Registrar and apply for special consideration in the determination of their standing. The application must be made on the ‘Application for Special Consideration’ form available from the Student Centre. This application explains the specific information the University requires in order to make a decision. Such requests should be lodged as soon as practicable after the occurrence and in any event not more than three days after the final examination in a subject’.

A photocopy of all material supporting an application for special consideration, as lodged with the Registrar, must also be provided to the Lecturer-in-charge within seven (7) days of any event for which special consideration is sought (preferably before the examination).

Students should be aware that ‘minor’ ailments are not eligible grounds for special consideration. Any unsubstantiated request for special consideration will be considered to be ‘minor’.

Supplementary Examinations

NOTE: Supplementary examinations are EXCEPTIONALLY RARE and are NOT given automatically. An ORAL component may also be required in addition to sitting a formal examination paper. If your performance (or attendance) throughout the session has not been satisfactory, or the reason why you did not attend the examination is not acceptable, you will be denied a supplementary examination. In sitting a supplementary exam, the highest grade awarded will be a PASS for that component of the assessment.

If a student is granted a supplementary examination but does not attend that supplementary examination, he/she will not be granted further assessment except in HIGHLY EXCEPTIONAL circumstances. Students are advised that if they are intending to travel overseas at the end of session/year they should consider taking out travel insurance which allows supplementary examinations as valid circumstances for cancelling travel.

Academic Misconduct

Attention is drawn to the following extract from the UNSW Calendar ‘Procedures’:
Academic Misconduct

‘Students are reminded that the University regards academic misconduct as a very serious matter. Students found guilty of academic misconduct are usually excluded from the University for two (2) years. Because of the circumstances in individual cases, the period of exclusion can range from one session to permanent exclusion from the University.

The following are some of the actions, which have resulted in student being found guilty of academic misconduct in recent years:

1. Taking unauthorised materials into an examination;
2. Submitting work for assessment knowing it to be the work of another person;
3. Improperly obtaining prior knowledge of an examination paper and using that knowledge in the examination;
4. Failing to acknowledge the source of material in an assignment.

Acknowledgment of Sources

Students are expected to acknowledge the source of ideas and expressions used in submitted work. To provide adequate documentation is not only an indication of academic honesty but also a courtesy enabling the marker to consult sources with ease. Failure to do so may constitute plagiarism, which is subject to a charge of academic misconduct.’